Notice of RCRA Class 1 Permit Modifications in Accordance with 20.4.1.900 NMAC (incorporating 40 CFR Part 270)

Waste Isolation Pilot Plant
Carlsbad, New Mexico

September 21, 2000

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Consistent with requirements of 20.4.1.900 New Mexico Administrative Code (NMAC) (hereafter referred to as Part 270 or Section 270.XX) the U. S. Department of Energy, Carlsbad Area Office is submitting to the New Mexico Environment Department (NMED) notice of a Class 1 modification to the Hazardous Waste Facility Permit (NM4890139088–TSDF) for the Waste Isolation Pilot Plant (WIPP). Specifically, this information is provided to comply with the requirements of Section 270.42(a)(1)**.**

The modifications are listed in Table 1**.** Listed information includes a reference to the applicable section of the permit, a brief description of the item, and the class of the item, as identified in Appendix I to Section 270.42. The relevant permit modification category, as identified in Appendix I, is provided as well. A more complete description of the Class 1 modifications is provided in Attachment A.

The identified changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment and the modified permit is no less stringent than the current permit.

Table 1. Class 1 Hazardous Waste Facility Permit Modifications

No.	Affected Permit Section	Item	Category	Attachment 1 Page #
1	a. Attachment H b. Attachment L c. Attachment P	Remove procedures from Attachment P and replace with functionally equivalent summaries.	A.1	A-1
2	a. Attachment H	Correct typographical errors and delete 2 figures	A.1	A-13
3	a. Attachment F b. Attachment G	Update figures to reflect current operations	A.1	A-17
4	a. Attachment H1	Add new training requirements and position	B.5.b	A-18
5	a. Attachment B1	Revise Attachment B to reflect more accurate data reporting	B.2.a	A-21
6	a. Attachment G	Revise Attachment G to reflect use of strobe lights	A.1	A-22
7	a. Attachment B	Revise the Land Disposal Restriction Form to requirements	B.1.a	A-23
8	a. Attachment B3	Revise tables to reflect the correct accuracy limits on laboratory control samples	A.1	A-25
9	a. Attachment F	Update Emergency Coordinator telephone numbers	B.6.d	A-30
10	a. Module I	Revise text to reflect recent financial assurance changes	B.1.a	A-31
11	a. Attachment G b. Attachment M1	Revise Figures to reflect current facility operations	A.1	A-32

12	a. Attachment B	Revise Attachment B to reflect the correct text which was incorrectly modified in a previous Class 1 submittal	A.1	A-33
13	a. Attachment B1	Revise text to reflect inconsistencies between Class 2 submittal and NMED Permit text	A.1	A-35
14	a. Attachment N	Revise Attachment N to indicate the use of updated sampling method, quantitation and data collection.	B.2.a	A-37
15	a. Attachment D1	Update operator logs to reflect current operations.	A.1	A-40
16	a. Module IV	Make change to Module IV that was not made on the July 20, 2000 Class1 modification submittal	A.1	A-41
17	a. Attachment F b. Attachment I c. Attachment M2	Revise Figures to reflect the use of the underground experimental area for astrophysics research	A.1	A-42

ATTACHMENT A

Item 1

Description:

The replacement of the current procedures in Attachment P with functionally equivalent summaries of those procedures and a condition to maintain current copies of the procedures in the Operating Record.

Basis:

This change removes the procedures within Attachment P and replaces them with functionally equivalent summaries. The complete procedures will remain as part of the Operating Record and will be open to review and inspection by the NMED at anytime. This change will allow the Department of Energy to update and revise referenced procedures within the Permit without requiring continual Permit modifications.

Discussion:

The documents contained within Attachment P were never intended to be included within the Hazardous Waste Facility Permit (HWFP). The NMED, on numerous occasions throughout the Permit Application review process, indicated that procedures should be referenced but not necessarily attached to the Permit.

The New Mexico regulations state in 20.4.1.500 and 900 NMAC, (incorporating 40 CFR Part 264 and 270) that only descriptions of procedures and plans are required to be submitted with the Part B Permit Application. For example, the requirements for training documentation in 20.4.1.970.14(b)(12) NMAC incorporating 40 CFR § 270.14(b)(12) state "A brief description of how training will be designed to meet actual job tasks in accordance with the requirements in §564.16(a)(3)." For groundwater monitoring all that is required by the regulations is as stated in 20.4.1.970.14(c)(6)(ii) NMAC incorporating 40 CFR § 270.14(c)(6)(ii): "A description of proposed sampling; analysis and statistical comparison procedures to be utilized in evaluating groundwater monitoring data."

Even the current HWFP states that certain procedures in Attachment P are not required. In Attachment A-5 it describes how site derived waste is managed and states "This waste generation and accumulation activity, when performed in compliance with 20.4.1.300 NMAC (incorporating 40 CFR § 262), is not subject to RCRA permitting requirements and, as such, is not addressed in the permit." Therefore any procedures dealing with site generated waste are not applicable to the HWFP.

The intent of the United States Environmental Protection Agency's (USEPA) hazardous waste permitting and modification processes has been to draft permit conditions such that minor deviations from design criteria do not require a permit modification. EPA has stated in the preamble to the Final Rule for Permit Modifications for Hazardous Waste Management Facilities (53 FR 37912) that "Again, EPA would like to clarify that as long as a specific permit condition is not affected by a change, a modification is not required." However, the restrictions placed upon the Permittees by the Permit Conditions require these continual modifications for minor procedural changes. This was not the intent of the modification process as suggested by the USEPA in 53 FR 37912. The example given by the USEPA reinforces the argument for removing specific procedures from the current HWFP. They state: "...changes in a computer program that is used in conjunction with the operating record could require a modification. It is not EPA's intent to require modifications for such recordkeeping methods. It is unlikely that actual procedures for maintaining the operating record will be specified in permits; therefore there is already significant flexibility in the method of maintaining the record, as long as the requirements of Sec. 264.73 are met."

It is clear that the continued inclusion of these procedures, which are currently in the Operating Record and open to NMED inspection and review at anytime, is unnecessary and unwarranted.

Revised Permit Text:

a. 1. Attachment H

A database is maintained which records training qualifications and course attendance. The database is used to identify course refresher and requalification dates. Training records on current personnel are kept in the Technical Training files. Technical training records on former employees are kept by the Technical Training Group for at least three years from the date of employment termination from the WIPP facility. Training documentation for emergency response training received by personnel called out in the WIPP Contingency Plan (Permit Attachment F) is maintained by the Technical Training Group. ~~Procedure WP 02-RC.04, "RCRA Training Documentation" (Permit Attachment P), defines the process of managing these specific training activities.~~ The documents which define the processes by which these training activities are managed are maintained by the Technical Training Group and are also part of the Operating Record.

b. 1. Attachment L-4c(1)

The WIPP ground-water level monitoring program (**WLMP**) is a subprogram of the DMP. The quality assurance activities of the WLMP are in strict accordance with ~~the WID Quality Assurance Program Description (**QAPD**),~~ WP 13-1 ~~(Permit Attachment P)~~, and the quality assurance implementing procedure specific to ground-water surface elevation monitoring is WIPP Procedure WP 02-EM1014[1], ~~"Groundwater Level Measurements"~~ ~~(Permit Attachment P)~~. Current versions of both WP 13-1 and WP 02-EM1014 are maintained in the WIPP Operating Record.

b. 2. Attachment L-4c(1)(ii)

Data recorded on the field data sheets and submitted by field personnel will be subject to guidelines outlined in WIPP Procedures WP 02-EM3001[2], ~~"Administrative Processes for Environmental Monitoring Programs"~~ and WP 02-EM3003[3], ~~"Non-radiological Data Validation and Verification" (Permit Attachment P)~~. Current copies of these procedures are maintained within the WIPP Operating Record. These procedures specify the processes for administering and managing such data. The data will be entered onto a computerized work sheet. The work sheet will calculate ground-water surface elevation in both feet and meters relative to the top of the casing and also relative to mean sea level. The work sheet will also adjust ground-water surface elevations to equivalent freshwater heads.

b. 3. Attachment L-4c(2)(i)

The electronic flow controller allows personnel collecting samples to control the rate of discharge during well purging to minimize the potential for loss of volatiles from the sample. As recommended in the "RCRA Ground-Water Monitoring Technical Enforcement Guidance Document" (EPA, 1986) the wells will be purged a minimum of three well bore volumes at a rate that will minimize the agitation of recharge water. This will be accomplished by monitoring formation pressure and matching the rate of discharge from the well as nearly as possible to the rate of recharge to the well. WIPP Procedure WP 02-EM1002[4], ~~"Electric Submersible Pump Monitoring System Installation and Operation,"~~ specifies the methods used for controlling flow

rates and monitoring formation pressure ~~(Permit Attachment P)~~. A current version of this document will be maintained in the WIPP Operating Record. Well purging requirements will be used in conjunction with serial sampling to determine when the ground-water chemistry stabilizes and is therefore representative of undisturbed ground water.

b. 4. Attachment L-4c(2)(i)

The DMP wells do not require the installation of a packer because sample biases due to well construction deficiencies are not present. However, pressures will be monitored using down hole automatic air line bubblers in the formation to maintain the water level above the pump intake. Pressure transducers may be used in line with bubblers to provide continual electronic monitoring through data acquisition systems. WIPP Procedure WP 02-EM1002, ~~"Electric Submersible Pump Monitoring System Installation and Operation,"~~ provides instructions for monitoring formation pressure using automatic airline bubblers in conjunction with pressure transducers and data acquisition systems ~~(Permit Attachment P)~~. A current version of this document will be maintained in the WIPP Operating Record.

b. 5. Attachment L-4c(2)(ii)

Protocols for collection of serial samples are specified in WIPP Procedure WP 02-EM1006[5], ~~"Final Sample and Serial Sample Collection" (Permit Attachment P)~~. Analysis of serial samples are specified in WIPP Procedures WP 02-EM1005[6], ~~"Groundwater Serial Sample Analysis" (Permit Attachment P)~~ and WP 02-EM1015[7], ~~"Water Quality Monitoring Using the YSI Model 3560 Monitoring System." (Permit Attachment P)~~. Current versions of these procedures will be maintained in the WIPP Operating Record.

b. 6. Attachment L-4c(2)(ii)

Upon completion of the collection of the last serial sample suite, the serial sample bottles accrued throughout the duration of the pumping of the well will be discarded. No serial sample bottles will be reused for sampling purposes of any sort. However, serial samples may be stored for a period of time depending upon the need. WIPP Procedure WP 02-EM1006, ~~"Final Sample and Serial Sample Collection,"~~ defines the protocols for the collection of final and serial samples. WIPP Procedure WP 02-EM1005, ~~"Groundwater Serial Sample Analysis,"~~ defines the protocols for serial sample analysis ~~(Permit Attachment P)~~. Current versions of these procedures will be maintained in the WIPP Operating Record.

b. 7. Attachment L-4c(2)(iii)

Water samples will be collected at atmospheric pressure using either the filtered or unfiltered sampling lines branching from the main sample line. Detailed protocols, in the form of procedures, assure that final samples will be collected in a consistent and repeatable fashion. WIPP Procedure WP 02-EM1006 defines the requirements for collection of final samples for analyses ~~(Permit Attachment P)~~. A current version of this procedure will be maintained in the WIPP Operating Record.

b. 8. Attachment L-4c(2)(iii)

Resulting wastes are disposed of in accordance with the WID Procedure ~~"Site-Generated, Non-Radioactive Hazardous Waste Management Plan,"~~ WP 02-RC.01[8] ~~(Permit Attachment P)~~. A current version of this procedure will be maintained in the WIPP Operating Record.

b. 9. Attachment L-4c(2)(iv)

The sample tracking system at WIPP will use uniquely numbered chain of custody (**CofC**) Forms and request for analysis (**RFA**) Forms. The primary consideration for storage or transportation is that samples shall be analyzed within the prescribed holding times for the parameters of interest. WIPP Procedure WP 02-EM3001, ~~"Administrative Processes for Environmental Monitoring Programs,"~~ provides instructions to ensure proper sample tracking protocol ~~(Permit Attachment P)~~. A current revision of this procedure will be maintained within the WIPP Operating Record .

b. 10. Attachment L-4c(2)(v)

To ensure the integrity of samples from the time of collection through reporting date, sample collection, handling, and custody shall be documented. Sample custody and documentation procedures for EM sampling and analysis activities are detailed in WIPP Procedure WP 02-EM3001, ~~"Administrative Processes for Environmental Monitoring Programs" (Permit Attachment P)~~. These procedures will be strictly followed throughout the course of each sample collection and analysis event. A current revision of this procedure will be maintained in the WIPP Operating Record.

b. 11. Attachment L-4d(2)

The equipment used in taking ground-water surface elevation measurements will be maintained in accordance with WIPP Procedure WP 10-AD3029[9], ~~"Calibration and Control of Monitoring and Data Collection Equipment" (Permit Attachment P)~~. A current revision of this procedure will be maintained in the WIPP Operating Record. The EM Section will be responsible for calibrating the needed equipment on schedule in accordance with written procedures. The EM Section will also be responsible for maintaining current calibration records for each piece of equipment.

b. 12. Attachment L-8

Specific Quality Assurance (**QA**) requirements for WIPP are defined in WID document ~~the WID Quality Assurance Program Description (**QAPD**),~~ WP 13-1 ~~(Permit Attachment P)~~. A current revision of this document will be maintained in the WIPP Operating Record. Requirements specific to the DMP are presented in this section.

b. 13. Attachment L-8b(1)(i)

Field measurements will include pH, SC, temperature, Eh, and static ground-water surface elevation. Field measurement accuracy will be determined using calibration check standards. Thermometers used for field measurements will be calibrated to the National Institute for Standards and Technology (**NIST**) traceable standard on an annual basis to assure accuracy. Accuracy of ground-water surface elevation measurements will be checked before each

measurement period by verifying calibration of the device within the specified schedule. ~~The QAPD, Section 2.4.4, Monitoring, Measuring, Test and Data Collection Equipment,~~ WID document WP 13-1 outlines the basic requirements for field equipment use and calibration ~~(Permit Attachment P)~~. WIPP Procedure WP 10-AD3029, ~~"Calibration and Control of Monitoring and Data Collection Equipment,"~~ contains instructions that outline protocols for maintaining current calibration of ground-water surface elevation measurement instrumentation ~~(Permit Attachment P)~~. A current revision of this document or procedure will be maintained in the WIPP Operating Record.

b. 14. Attachment L-8d

Provisions and responsibilities for the preparation and use of instructions and procedures at WIPP are outlined in WID document WP 13-1 ~~Section 1.4, Documents, Section 2.1.2, Implementing Procedures, and Section 4, Sample Control, and Quality Assurance Requirements, of the QAPD (Permit Attachment P)~~. Any activities performed for ground-water monitoring that may affect ground water will be performed in accordance with documented and approved procedures which comply with the Permit and the requirements of 20 ~~NMAC~~ 4.1.500 NMAC (incorporating 40 CFR §264 Subpart F).

Technical procedures, as specified elsewhere in this DMP, have been developed for each quality-affecting function performed for ground-water monitoring. The technical procedures unique to the DMP will be controlled by the ES&H at WIPP. The procedures are sufficiently detailed and include, when applicable, quantitative or qualitative acceptance criteria.

Procedures were prepared in accordance with requirements in WID document WP 13-1 ~~Section 1.4, Documents, Section 2.1.2, Implementing Procedures, and Section 4, Sample Control, and Quality Assurance Requirements, of the QAPD (Permit Attachment P)~~. A current revision of this document will be maintained in the WIPP Operating Record.

b. 15. Attachment L-8f

Process control requirements, defined in WID document WP 13-1 ~~the QAPD Section 2.1, Work Processes and Section 4, Sample Control and Quality Assurance Requirements,~~ are met, and will continue to be met, for this DMP ~~(Permit Attachment P)~~. A current revision of this document will be maintained in the WIPP Operating Record.

b. 16. Attachment L-8g

Inspection and surveillance activities will be conducted as outlined in WID document WP 13-1 ~~Section 2.4, Inspection and Testing, and Section 3.2, Independent Assessment of the QAPD (Permit Attachment P)~~. The Q&RA Department will be responsible for performing the applicable inspections and surveillance on the scope of work. EM section personnel will be responsible for performance checks as defined in applicable procedures and determined for the Permittees by WID metrology laboratory personnel. Performance checks for the DMP will determine the acceptability of purchased items and assess degradation that occurs during use. A current revision of this document will be maintained in the WIPP Operating Record.

b. 17. Attachment L-8h

WID document WP 13-1 ~~QAPD Section 2.4.4, Monitoring, Measuring, Testing, and Data Collection Equipment (Permit Attachment P)~~, outline the basic requirements for control and calibrating monitoring and data collection (**M&DC**). M&DC equipment shall be properly controlled, calibrated, and maintained according to WIPP Procedure WP 10-AD3029,

~~"Calibration and Control of Monitoring and Data Collection Equipment,"~~ to ensure continued accuracy of ground-water monitoring data. Results of calibrations, maintenance, and repair will be documented ~~(Permit Attachment P)~~. Calibration records will identify the reference standard and the relationship to national standards or nationally accepted measurement systems. Records will be maintained to track uses of M&DC equipment. If M&DC equipment is found to be out of tolerance, the equipment will be tagged and it will not be used until corrections are made. A current revision of this document or procedure will be maintained in the WIPP Operating Record .

b. 18. Attachment L-8i

WID document WP 13-1 ~~Section 1.3, Quality Improvement, Section 4.4, Disposition of Nonconforming Samples, of the QAPD (Permit Attachment P)~~ specifies the system used at WIPP for ensuring that appropriate measures are established to control nonconforming conditions. Nonconforming conditions connected to the DMP will be identified in and controlled by documented procedures. Equipment that does not conform to specified requirements will be controlled to prevent use. The disposition of defective items will be documented on records traceable to the affected items. Prior to final disposition, faulty items will be tagged and segregated. Repaired equipment will be subject to the original acceptance inspections and tests prior to use. A current revision of this document will be maintained in the WIPP Operating Record.

b. 19. Attachment L-8j

Requirements for the development and implementation of a system to determine, document, and initiate appropriate corrective actions after encountering conditions adverse to quality at WIPP are outlined in WID document WP 13-1 ~~Section 1. 3, Quality Improvement, of the QAPD (Permit Attachment P)~~. Conditions adverse to acceptable quality will be documented and reported in accordance with corrective action procedures and corrected as soon as practical. Immediate action will be taken to control work performed under conditions adverse to acceptable quality and its results to prevent quality degradation. A current revision of this document will be maintained in the WIPP Operating Record.

b. 20. Attachment L-8k

WID document WP 13-1 ~~Section 1.5, Records, of the QAPD (Permit Attachment P)~~ outlines the policy that will be used at WIPP regarding identification, preparation, collection, storage, maintenance, disposition, and permanent storage of QA records. A current revision of this document will be maintained in the WIPP Operating Record.

c. 1. Attachment P

ATTACHMENT P

WIPP TECHNICAL PROCEDURE SUMMARIES REFERENCED IN OTHER ATTACHMENTS

TABLE OF CONTENTS

	WP 02-EM1005	~~Groundwater Serial Sample Analysis (Revision 1)~~
	WP 02-EM1006	~~Final Sample and Serial Sample Collection (Revision 1)~~
	WP 02-EM1014	~~Groundwater Level Measurement (Revision 0)~~
	WP 02-EM1015	~~Water Quality Monitoring Using the YSI Model 3560 Monitoring System (Revision 0)~~
	WP 02-EM3001	~~Administrative Processes for Environmental Monitoring Programs (Revision 1)~~
	WP 02-EM3003	~~Non-radiological Data Validation and Verification (Revision 0)~~
	WP 02-RC.01	~~Site Generated, Non-Radioactive Hazardous Waste Management Plan (Revision 0, Change 4)~~
	WP 02-RC.04	~~RCRA Training Documentation (Revision 0, Change 1)~~
	WP 10-AD3029	~~Calibration and Control of Monitoring and Data Collection Equipment (Revision 0, Change 1)~~
	WP 12-HP1100	~~Radiological Surveys (Revision 2)~~
	WP 13-1	~~WID Quality Assurance Program Description (**QAPD**) (Revision 17~~16, ~~Change 6)~~

The most current revision of the complete document or procedure is maintained within the WIPP Operating Record.

c. 2. Attachment P

WP 02-EM1002

~~**Electric Submersible Pump Monitoring System Installation and Operation**~~

The procedure following this page has been removed in its entirety and replaced with a Procedure Summary. The complete and current procedure is retained within the WIPP Operating Record .

Procedure Summary

WP 02-EM1002 is a technical procedure that provides step-by-step instructions for acquiring ground-water samples using electric submersible pumps (ESPs). The procedure addresses the equipment in general, lists precautions and limitations which assure that only qualified individuals operate the equipment, prerequisite actions which assure the correct installation and operation. The procedure details how to install the various subsystems such as the surface discharge and pressure monitoring system and the pressure monitoring bubbler and how to start up and shut down the ESP.

c. 3. Attachment P

WP 02-EM1005

~~Groundwater Serial Sample Analysis~~

The procedure following this page has been removed in its entirety and replaced with a Procedure Summary. The complete and current procedure is retained within the WIPP Operating Record .

Procedure Summary

WP 02-EM1005 is a technical procedure that provides step-by-step instructions for on site analysis of ground water to determine ground-water stability prior to the collection of final samples for analysis. The procedure addresses the equipment in general, lists precautions and limitations which assure that only qualified individuals operate the equipment, prerequisite actions which assure data quality. The procedure addresses the field measurement of Eh, pH, temperature, specific gravity, specific conductance, alkalinity, chloride, divalent cation, and total iron as indicators of ground-water stability.

c. 4. Attachment P

WP 02-EM1006

~~Final Sample and Serial Sample Collection~~

The procedure following this page has been removed in its entirety and replaced with a Procedure Summary. The complete and current procedure is retained within the WIPP Operating Record .

Procedure Summary

WP 02-EM1006 is a technical procedure that provides step-by-step instructions for acquiring ground-water samples from the WQSP wells in the vicinity of WIPP. The procedure addresses the equipment in general, lists precautions and limitations which assure that only qualified individuals operate the equipment, and prerequisite actions which assure the data quality. The procedure addresses collection of samples from private wells, collection of serial ground-water samples, the collection of final samples for submittal to the laboratory, and data review by the monitoring task leader.

c. 5. Attachment P

WP 02 EM1014

~~Groundwater Level Measurement~~

The procedure following this page has been removed in its entirety and replaced with a Procedure Summary. The complete and current procedure is retained within the WIPP Operating Record .

Procedure Summary

WP 02-EM1014 is a technical procedure that specifies the steps followed by Environmental Monitoring (**EM**) personnel for making manual ground-water level measurements in ground-water wells in the vicinity of the WIPP facility. The procedure provides general instructions including prerequisites, safety precautions, performance frequency, quality assurance, and records. Specific instructions are included for using the water level measurement electrical conductance probe and data management.

c. 6. Attachment P

WP 02-EM1015

~~**Water Quality Monitoring Using the YSI Model 3560 Monitoring System**~~

This procedure has been removed in its entirety and incorporated into Procedure WP 02-EM1005. The complete and current procedure is retained within the WIPP Operating Record .

c. 7. Attachment P

WP 02-EM3001

~~**Administrative Processes for Environmental Monitoring Programs**~~

The procedure following this page has been removed in its entirety and replaced with a Procedure Summary. The complete and current procedure is retained within the WIPP Operating Record .

Procedure Summary

WP 02-EM3001 is a management control procedure to provide the administrative guidance to be used by Environmental Monitoring (EM) personnel to maintain quality control (QC) associated with EM sampling activities and to assure that data acquired under the WIPP Environmental Monitoring Program are valid. The precautions and limitations portion of this procedure assure that only qualified personnel acquire samples under the EM program, that cross contamination of sampling equipment is prevented, and that sample hold times are not exceeded. The Performance portion of the procedure provides step-by-step instructions for Quality Assurance/Quality Control (QA/QC) implementation, the use of data sheets and sample tracking logbooks, sample tacking from collection to submittal, and actions to take if sample results indicate the potential for exceeding a regulatory limit.

c. 8. Attachment P

WP 02-EM3003

~~**Non-radiological Data Validation and Verification**~~

The procedure following this page has been removed in its entirety and replaced with a Procedure Summary. The complete and current procedure is retained within the WIPP Operating Record .

Procedure Summary

WP 02-EM3003 is a management control procedure to provide Environmental Monitoring (EM) personnel instructions on performing validation and verification of laboratory data containing the analysis results of non-radiological samples. This procedure is used only on the analytical results of the non-radiological environmental surveillance sampling performed around the WIPP site.

c. 9. Attachment P

WP 02-RC.01

~~Site Generated, Non-Radioactive Hazardous Waste Management Plan~~

The procedure following this page has been removed in its entirety and replaced with a Procedure Summary. The complete and current procedure is retained within the WIPP Operating Record .

Procedure Summary

WP 02-RC.01 is a step-by-step procedure that defines site-generated non-radioactive hazardous waste and lists responsibilities of waste management organizations including the generator, waste handlers, sampling personnel, safety personnel, and compliance personnel. In addition, the procedure defines training requirements, container marking requirements, spill response, and lists waste disposal prohibitions. A Section of the procedure is focused on waste management practices including the management in satellite accumulation areas, the hazardous waste staging area (which includes, but is not limited to, materials awaiting analysis), the establishment of accumulation times, and hazardous waste disposal.

c. 10. Attachment P

WP 02-RC.04

~~RCRA Training Documentation~~

The document following this page has been removed in its entirety and replaced with a Document Summary. The complete and current procedure is retained within the WIPP Operating Record.

Document Summary

WP 02-RC.04 defines the process for evaluating, tracking and maintaining the Resource Conservation and Recovery Act (RCRA) training requirements contained in 20.4.1.300, 500, 600, and 900 NMAC (incorporating 40 CFR 262, 264, 265, and 270). Personnel of the Waste Isolation Pilot Plant (WIPP) must successfully complete training consisting of classroom instruction and applicable on-the-job training. Training includes instruction in hazardous waste management procedures relevant to the position in which they are employed. The HWFP has been integrated into this plan. The WIPP Permit stipulates that within 30 days of employment, individuals working at WIPP successfully complete the General Employee Training (GET) class. GET provides initial RCRA training to each employee by providing instruction and information on radiation safety, emergency preparedness, spill response, safety, security, hazard communications, and a brief history and overview of the RCRA. GET also includes a policies and procedures overview and first responder awareness training in which each individual is instructed in how to initiate an emergency response sequence by notifying the Central Monitoring Room (CMR). Additionally, more detailed hazardous waste, emergency response and similar training may be required dependent upon the employee's job description. Those job descriptions and their associated level of training is outlined in the HWFP. This plan also addresses the mechanism for addressing changes in the employees duties, job descriptions and position.

c. 11. Attachment P

WP 10-AD3029

~~Calibration and Control of Monitoring and Data Collection Equipment~~

The document following this page has been removed in its entirety and replaced with a Document Summary. The complete and current procedure is retained within the WIPP Operating Record.

Document Summary

WP 10-AD3029 provides the step-by-step protocols for the establishment and maintenance of a master database of monitoring and data collection (**M&DC**) equipment, the recall process for equipment needing calibration, the performance of calibrations, the management of calibration results to determine the adequacy of recall frequencies, functional testing of M&DC equipment, and reporting including out-of-tolerance reporting and expired calibration reporting. In addition, the procedure provides step-by-step process for the storage of calibrated M&DC equipment and the use of rental equipment.

c. 12. Attachment P

WP 12-HP1100

~~Radiological Surveys~~

The document following this page has been removed in its entirety and replaced with a Document Summary. The complete and current procedure is retained within the WIPP Operating Record.

Document Summary

WP 12-HP1100 provides specific methods and guidance for performing surface contamination, dose rate surveys of items, equipment, and areas. Radiological surveys are to be performed: (1) routinely, as specified by Attachment 4, Radiological Survey Frequencies, and as scheduled by the Operational Health Physics(OHP) Manager; (2) in association with a Radiation Work Permit (RWP); and/or (3)upon a special request. This procedure does not cover monitoring of personnel. The limits for performing radiological receipt surveys are driven by 10 CFR 835.

c. 13. Attachment P

WP 13-1

~~WID Quality Assurance Program Description (QAPD)~~

The document following this page has been removed in its entirety and replaced with a Document Summary. The complete and current document is retained within the WIPP Operating Record.

Document Summary

WP 13-1 identifies federal and industry quality requirements applicable to the WID quality assurance program. This document establishes the minimum quality requirements for WID personnel and guidance for the development and implementation of quality assurance programs by all WID departments. Requirements and guidance are based on criteria contained in applicable Federal Regulations, DOE Directives, EPA requirements documents, industry

standards and the Department of Energy (DOE) Carlsbad Area Office Quality Assurance Program Document (QAPD). Source documents, which fall into one of three categories:

- Regulatory documents that define the requirements necessary for WIPP to be granted a certificate of compliance by the federal government and permit(s) by state governmental agencies to dispose of mixed transuranic (TRU) wastes in the WIPP repository
- Commitment documents that are imposed by DOE
- Guidance documents that provide additional information useful in developing quality assurance programs

Item 2

Description:

Correction of typographical errors; revise organizational chart and delete two figures.

Basis:

These changes reflect current facility organizations, correct typographical errors and remove figures which require continual modification. No requirements are reduced or removed.

Discussion:

While maintaining and up-to-date organizational chart several typographical errors were encountered. During this time it is also requested that the Figures in Attachment H entitled “Oral Board Sheet” and “Training Course Attendance Logs” be deleted. There will be no change in the training required nor in the content of that training. All records will be maintained by the Technical Training Group at the WIPP facility and are open to NMED review.

Revised Permit Text:

a. 1. Attachment H

See Attachment B for revisions to Figure H-1

a. 2. Attachment H

Figures H-2 and H-3 are removed.

a. 3. Attachment H Table of Contents

Figure	Title
H-1	Abbreviated WIPP Facility Organizational Chart Showing the Organizational Location of Training, Waste Handling, and Emergency Response Functions
~~H-2~~	~~Oral Board Sheets~~
~~H-3~~	~~Training Course Attendance Logs~~

a. 4. Attachment H-1

The Human Resources Department ensures that required RCRA-related training is conducted by ~~certified~~ qualified instructors. On-the-job training is conducted by Level I instructors. Level I instructors are subject matter experts; members of line organizations who have qualified on the related equipment and have attended the on-the-job training course. Classroom instruction is provided by Level II and Level III instructors. Level II instructors are members of Technical Training and line organizations who are qualified to conduct limited classroom training in their technical area of expertise. Level III instructors are members of Technical Training who are qualified to conduct classroom training, skills evaluation, and needs assessment. Level II and III instructors are required to attend a train-the-trainer course and periodic refresher training.

Cognizant line managers provide significant input on training requirements for the WIPP facility to ~~certified~~ qualified instructors who develop the following, as required:

Table of Contents

- **!** Classroom Instruction

  Objectives
  Lesson Plans
  Student Materials
  Examinations

- **!** On-the-Job Training

  Qualification Cards

Technical training materials are approved by the Technical Training Manager and the cognizant line manager.

Following technical training, trainees must successfully complete written examinations or oral examinations conducted by boards made up of cognizant personnel (referred to as "oral boards") to demonstrate competency. The records of oral examinations are called "oral board sheets" ~~(Figure H-2)~~. These examinations are based on objectives and/or competency statements. Oral boards are based on knowledge learned in the on-the-job training process. Trainees also provide feedback on the content and quality of instruction, at this time, in the form of course critiques and verbal input.

Technical training documentation is maintained by the Technical Training Group located at the WIPP facility. These technical training records include:

- **!** Course Attendance ~~(Figure H-3)~~
- **!** Completed Qualification Cards
- **!** Off-Site Training Documentation
- **!** Oral Board Sheets

a. 5. Attachment H-1a

Employees at the WIPP facility who are involved in hazardous waste management activities receive the same core training. A list of hazardous waste management job titles and position descriptions are provided in Attachment ~~H-1~~ H1. An up-to-date list of personnel assigned to these positions is maintained by Environmental Compliance & Support in accordance with 20. ~~NMAC~~ 4.1.500 NMAC (incorporating 40 CFR §264.16). These core hazardous waste management training courses are described briefly in Section H-1(b)(1) and outlines of the core classes, as well as other job specific training classes, are included in Attachment ~~H-2~~ H2. Any changes to the training plan that decrease the type or amount of training that is given to employees will be handled as a Class 2 modification, as specified in 20 . ~~NMAC~~ 4.1.900 NMAC (incorporating 40 CFR §270.42). Other changes to the training plan will be handled as Class 1 modifications. In accordance with 20 ~~NMAC~~ 4.1.500 NMAC (incorporating 40 CFR §264.16(d)(2)), the job descriptions include hazardous and TRU mixed waste management job duties, required skills, qualifications, and experience, as well as educational requirements.

a. 6. Attachment H-1b(1)

This training is provided in GET-20X, conducted by the WIPP qualified ~~certified~~ instructors, and must be completed within 30 days of employment.

Course outlines for GET-20X, GET-20XA, HWW-101, and HWW-102 are provided in Permit Attachment H2 ~~H-2~~.

a. 7. Attachment H-1d

Beyond these core courses, training is designed and implemented relevant to the specific job functions being performed. For example, employees who operate key pieces of equipment (such as forklifts, hoists, etc.) must be trained to operate and inspect equipment and to recognize maintenance problems before a specific job function is performed. These employees must receive on-the-job training and demonstrate the ability to operate the equipment, as appropriate, before being qualified. This process is controlled and documented by the qualification process described in Section H-1. A complete listing of active qualification cards, along with descriptions of training courses, are on file at the WIPP facility. Summaries of qualification cards and other job specific training courses are included in Permit Attachment H2 ~~H-2.~~

Managers who have direct responsibility for supervising hazardous waste management personnel receive hazardous waste management training relevant to their positions. This training will include GET-20X and its refresher GET-20XA, which is required for all employees, and the Hazardous Waste Worker Supervisor course HWS-101 and its refresher HWS-101A. In addition, a manager may also take HWW-101 and its refresher HWW-102 if these courses are determined to be useful for his/her position. These course descriptions are included in Permit Attachment H2 ~~H-2~~.

a. 8. Attachment H-1e

A list of required training for these positions is included in each job position description in Permit Attachment H2 ~~H-1~~.

Because these response teams are used for unusual occurrences and not routine hazardous waste handling, a RCRA position title is not included. A duty description is included which summarizes basic anticipated duties of these positions. Training records for these individuals are maintained in each individual's training file in Technical Training located at the WIPP site. These training requirements must be met prior to an individual serving in an emergency response function

Hazardous waste handling and emergency response personnel receive training that ensures their familiarity with emergency procedures, emergency equipment, and emergency systems including:

- Procedures for using and inspecting facility emergency and monitoring equipment
- Repairing and replacing facility emergency and monitoring equipment (RADCON only)
- Communications and alarm systems
- Response to fires or explosions
- Shutdown of operations.

Course outlines for emergency response training courses are provided in Permit Attachment H2 ~~H-2.~~

The RCRA Emergency Coordinator receives training relevant to the RCRA Contingency Plan and must be familiar with the contents of the RCRA Contingency Plan prior to serving as RCRA Emergency Coordinator. Documentation of this training is maintained in the RCRA Emergency Coordinator's training file. All individuals qualified to serve as RCRA Emergency Coordinators are required to complete Contingency Plan training (SAF-645). RCRA Emergency Coordinators

are notified of changes to the contingency plan by a document change notice, which is distributed weekly. This notice lists all of the controlled documents that have been changed during the week. Office wardens receive Office Warden Training (SAF-632) and are required to take an annual refresher. In addition, the training requirements of the Central Monitoring Room (CMR) operator are included in Permit Attachment H1 ~~H-1~~. The CMR operator is listed in Permit Attachment F as an emergency response related position.

Item 3

Description:

Revise figures to reflect current operations.

Basis:

Revise Figures F-1, F-1a, F-6, F-8, and G-2 to reflect the trailers that are no longer on the site and the installation of a new storage shed.

Discussion:

The movement of trailers to and from the WIPP facility is an ongoing process. This change reflects the removal of some of those trailers from the facility boundary. It also indicates the location of a new storage shed within the facility boundary. The revised Figures have also been labeled as “typical” so that similar updates will not require a Permit modification. Current copies of facility drawings will be maintained within the WIPP Operating Record.

Revised Permit Text:

a. 1. Attachment F

See Attachment B for revisions to Figures F-1, F-1a, F-6 and F-8.

b. 1. Attachment G

See Attachment B for the revisions to Figure G-2

Item 4

Description:

Add a new position to the Training Requirements in Attachment H1.

Basis:

The addition of new personnel requires a modification in Attachment H1.

Discussion:

A new position has been added at the WIPP facility. That position is Manager, Shipping Coordination. This new position requires changes to the Training Requirements as specified in Attachment H1.

Revised Permit Text:

a. 1. Attachment H1 Table of Contents

a. 2. Attachment H1 RCRA Hazardous Waste Management Job Titles and

Descriptions

RCRA Hazardous Management Job Titles

Hazardous Waste Worker
TRU Waste Handlers
Underground Hazardous Waste Worker
Non-TRU Waste Handlers
Waste Operations Administrative Assistant
WWIS Data Administrator
Manager, Waste Operations
Manager, Shipping Coordination
Radiological Control Technician
Manager, Radiation Control
Technical Trainer
Manager, Technical Training
Emergency Services Technician
Quality Assurance Technician
Team Leader, Inspection Services
Facility Inspection, Repair, and Service Team (FIRST) Leader
Facility Inspection, Repair, and Service Team (FIRST)
Sampling Team Member
Sampling Team Assistant
Manager, Environmental Compliance and Support
Facility Shift Engineer
Facility Shift Manager
Central Monitoring Room Operator
Waste Hoist Operator
Waste Hoist Shaft Tender
Waste Hoisting Manager
Chief Office Warden
Assistant Chief Office Warden
Mine Rescue Team Member
First Line Initial Response Team member
Emergency Response Team
Fire Brigade
Fire Protection Technician

a. 3. Attachment H1 Job Descriptions

Position Title: Manager Shipping Coordination

Duties:

- Oversee all TRU waste and non-TRU handling activities conducted by Shipping Coordination

Requisite Skills, Experience and Education:

B.S. degree, or equivalent, in nuclear-related field

Training (Type/Amount):

! General Employee Training (GET-19X/GET-20X)

- General Employee Training Refresher (GET-19XA/GET-20XA)
- Hazardous Waste Worker Supervisor (HWS-101/101A)

Item 5

Description:

Revise Attachment B to reflect more accurate data reporting

Basis:

This modification will ensure that the generator/storage sites have a consistent mechanism by which to reference procedures.

Discussion:

The change in Attachment B will align the generator/storage sites document numbering system and/or documentation of procedure revision numbers to ensure consistency with the Permit requirements.

Revised Permit Text:

a. 1. Attachment B-1d

- The Waste Stream WIPP Identification Number
- The designated Summary Category Group
- A listing of acceptable knowledge documentation used to identify the waste stream
- The waste characterization procedures used including title, revision number and/or date of the procedure ~~and the reference and date of the procedure~~

Item 6

Description:

Revise Attachment G to reflect the use of strobe lights on bulkhead vehicle doors.

Basis:

This modification will allow the use of strobe lights in lieu of warning bells on newly installed bulkhead vehicle doors within the underground.

Discussion:

No changes will be made on the existing bulkhead vehicle doorways. New bulkhead vehicle doors will have strobe lights as warning devices in place of bells. The bells may impact the hearing of workers in the underground and therefore the strobe lights are a more effective option.

Revised Permit Text:

a. 1. Attachment G-1

In addition, other physical means are utilized to safeguard pedestrians/personnel when underground such as:

All equipment operators are required to sound the vehicle horn when approaching intersections.

All airlock and bulkhead vehicle doors are equipped with warning bells or strobe lights to alert personnel when door opening is imminent.

Item 7

Description:

Clarify and revise the requirements for the shipping documentation to be submitted to the Permittees.

Basis:

This modification will ensure that all generator storage sites are consistent in their submittals to the WIPP facility.

Discussion:

It is necessary that all generator/storage sites submit consistent information to the WIPP facility. This modification allows this to occur while ensuring that the submittals comply with current regulations. This modification also incorporates new regulations regarding the LDR form. These regulations were incorporated into 20.4.1 NMAC on June 14, 2000.

Revised Permit Text:

a. 1. Attachment B-4b(2)

B-4b(2) Phase II Waste Shipment Screening and Verification

Phase II of the waste shipment screening and verification process includes examination of a waste shipment after the waste shipment has arrived. The Phase-II determinations are: 1) a determination of the completeness and accuracy of the EPA Hazardous Waste Manifest; 2) a determination of waste shipment completeness; 3) a determination of land disposal restriction notice completeness (see Section B-4b(2)(ii); and 4) an identification and resolution of waste shipment irregularities. Only those waste containers that pass all Phase II waste screening determinations will be emplaced at WIPP. For each container shipped, the Permittees shall ensure that the generator/storage sites provide the following information:

Hazardous Waste Manifest Information:

- Generator/storage site name and EPA ID
- Generator/storage site contact name and phone number
- Quantity of waste
- List of the hazardous waste codes in the shipment
- Listing of all shipping container IDs (TRUPACT-II serial number)
- Signature of authorized generator representative

~~Land Disposal RestrictionNotice Information:~~

- ~~EPA Hazardous Waste Number(s)~~
- ~~Hazardous waste manifest number~~
- ~~Date the waste is subject to prohibition~~
- ~~Note that the waste is not prohibited from land disposal at WIPP~~

Specific Waste Container information:

- Waste Stream Identification Number
- List of Hazardous Codes per Container
- Certification Data ~~(Nuclide info, etc.)~~
- Shipping Data (Assembly numbers, ship date, shipping category, etc.)

This information shall also be supplied electronically to the WWIS. The container-specific information will be supplied electronically as part of the Level 3 Phase I Screening, and shall be supplied prior to the Permittees' management, storage, or disposal of the waste.

a. 2. Attachment B-4b(2)(ii)

B-4b(2)(ii) Examination of the Land Disposal Restriction **(LDR**) Notice

TRU mixed waste is exempt from the LDRs by the Land Withdrawal Act Amendment (Public Law 104-201). This amendment states that WIPP "Waste is exempted from treatment standards promulgated pursuant to section 3004(m) of the Solid Waste Disposal Act (42 U.S. C. 6924(m)) and shall not be subjected to the Land Disposal prohibitions in section 3004(d), (e), (f), and (g) of the Solid Waste Disposal Act." Therefore, with the initial ~~each waste~~ shipment of a ~~LDR~~ TRU mixed waste stream, the generator shall provide the Permittees with a ~~notice that the waste is not prohibited from land disposal~~ one time written notice. The notice must include the information listed below.

Land Disposal Restriction Notice Information:

- EPA Hazardous Waste Number(s) and Manifest Numbers of first shipment of a mixed waste stream
- Statement: this waste is not prohibited from land disposal
- Date the waste is subject to prohibition

This information is the applicable information taken from column "268.7(a)(4)" of the "Generator Paperwork Requirements Table" in 20 .4.1.800 NMAC (incorporating 40 CFR 268.7(a)(4)). Note that item "5" from the "Generator Paperwork Requirements Table" is not applicable since waste analysis data are provided electronically via the WWIS and item "7" is not applicable since WIPP waste is exempted from the treatment standards.

The Permittees will review the LDR notice for accuracy and completeness. The generator will prepare this notice in accordance with the applicable requirements of 20.4.1.800 NMAC~~.4.1.800~~ (incorporating 40 CFR §268.7(a)(~~3~~4)).

Item 8

Description:

a. Revise the acceptance criteria and corrective action for the VOC and SVOC laboratory control samples (LCS) for solid analysis in Tables B3-5 and B3-7 to reference the accuracy ranges in Table B3-4 and B3-6 respectively.

b. Revise footnote "a" in Tables B3-4 and B3-6 to incorporate language from footnote "b" of Table B3-8 to allow for use of established statistical control limits as recommended by SW-846 and currently allowed by the permit for metals analysis of solid samples.

Basis:

a. The Permit is inconsistent with the way it requires the accuracy limits for VOC, SVOC, and metals LCSs for solid analysis to be applied. The accuracy limits are specified per analyte in Tables B3-4 and B3-6 following SW-846 recommendations that are based on the differing degrees of recovery that can be reasonably expected for various analytes. However, Tables B3-5 and B3-7 require that one specific range be met regardless of the analyte. Changing the accuracy limits to be consistent with the analyte-specific limits makes the permit more internally consistent and incorporates SW-846 methodologies.

b. Currently, Table B3-8 has language, in footnote "b," that allows a laboratory to use established statistical control limits, following the recommendations of SW-846. However, the footnote is missing from the accuracies specified for VOCs (Table B3-4) and SVOCs (Table B3-6). Adding the footnote will make the permit more internally consistent and incorporate SW-846 methodologies.

Discussion:

a. SW-846 recommends initial accuracy ranges for LCS recoveries that are based on the performance of each analyte using the specified method. Currently, for the metals, the acceptance criteria for LCS recoveries specified in Table B3-9 references the analyte-specific ranges that are in Table B3-8, which for metals are all the same. However, the analyte-specific ranges specified in Tables B3-6 for SVOCs and B3-4 for VOCs vary depending on the analyte. The LCS acceptance criterion in Table B3-7 (SVOCs) and Table B3-5 (VOCs) is a single range and does not reference the analyte-specific acceptance criteria in Table B3-6 (SVOCs) and Table B3-4 (VOCs) respectively. The single range specified as the acceptance criterion for the VOCs and SVOCs is 80 to 120%.

The analyte-independent 80 to 120% acceptance criterion is not consistent with SW-846 guidelines for analyte-dependent ranges. The proposed modification makes the permit consistent with the analyte-dependent ranges recommended by SW-846 and internally consistent with the way that the permit currently references the analyte-dependent ranges for metals.

b. SW-846 recommends that statistical control limits be used for accuracy ranges once they are established. This is based on the fact that even if a system is performing within the initial default ranges, it may not be performing well based on its past history (i.e., established statistical control limits). The permit currently allows the use of established statistical control limits for the metals analysis using the following footnote on the accuracy range column:

Table B3-8, footnote b states:

> "Applies to laboratory control samples and laboratory matrix spikes. If a solid laboratory control sample material which has established statistical control limits is used, then the established control limits for that material should be used for accuracy requirements."

This footnote follows the SW-846 recommendation that laboratories establish their own statistically-based control limits and use them for evaluating performance. However, the accuracy ranges in Table B3-6 for SVOCs and Table B3-4 for VOCs do not contain this language in the footnote on the accuracy range column.

Therefore, the permit requires that, for VOCs and SVOCs, that the laboratory meets the specific accuracy range in the table in lieu of established statistical control limits as recommended by SW-846 and allowed for

the metals analysis. The footnote for the accuracy range column in Table B3-6 for SVOCs and Table B3-4 for VOCs should be modified to be consistent with the footnote on Table B3-8 and SW-846 recommendations.

Revised Permit Text:

a. 1. Attachment B3, Table B3-5

TABLE B3-5
SUMMARY OF LABORATORY QUALITY CONTROL SAMPLES AND FREQUENCIES FOR VOLATILE ORGANIC COMPOUND ANALYSIS

QC Sample	Minimum Frequency	Acceptance Criteria	Corrective Action[a]
Method performance samples	Seven (7) samples initially and four (4) semiannually	Meet Table B3-4 QAOs	Repeat until acceptable
Laboratory duplicates[b]	One (1) per analytical batch	Meet Table B3-4 precision QAOs	Nonconformance if RPDs > values in Table B3-4
Laboratory blanks	One (1) per analytical batch	Analyte concentrations # 3 x MDLs	Nonconformance if analyte concentrations > 3 x MDLs
Matrix spikes[b]	One (1) per analytical batch	Meet Table B3-4 accuracy QAOs	Nonconformance if %Rs are outside the range specified in Table B3-4
Matrix spike duplicates	One (1) per analytical batch	Meet Table B3-4 accuracy and precision QAOs	Nonconformance if RPDs > values and %Rs outside range in Table B3-4
Laboratory control samples	One (1) per analytical batch	~~80 - 120 %R~~ Meet Table B3-4 accuracy QAO's	Nonconformance if %R < 80 or > 120
GC/MS Calibration	BFB Tune every 12 hours 5-pt. Initial Calibration initially, and as needed	Abundance criteria met as per method Calibrate according to SW-846 Method requirements: %RSD for CCC # 30, %RSD for all other compounds # 15% Average response factor (RRF) used if %RSD # 15, use linear regression if %RSD >15; R or R^2 $ 0.990 if using alternative curve System Performance Check Compound (SPCC) minimum RRF as per SW-846 Method; RRF for all other compounds $ 0.01	Repeat until acceptable

QC Sample	Minimum Frequency	Acceptance Criteria	Corrective Action[a]
GC/MS Calibration (continued)	Continuing Calibration every 12 hours	%D # 20 for CCC; SPCC minimum RRF as per SW-846 Method; RRF for all other compounds $ 0.01 RT for internal standard must be ± 30 seconds from last daily calibration, internal standard area count must be >50% and <200% of last daily calibration	Repeat until acceptable
GC/FID Calibration	3-pt. Initial Calibration initially and as needed Continuing Calibration every 12 hours	Correlation Coefficient $ 0.990 or %RSD # 20 for all analytes %D or %Drift for all analytes # 15 of expected values, RT ± 3 standard deviations from initial calibration	Repeat until acceptable.
Surrogate compounds	Each analytical sample	Average %R from minimum of 30 samples for a given matrix ±3 standard deviations	Nonconformance if %R < (average %R - 3 standard deviation) or > (average %R + 3 standard deviation)
Blind audit samples	Samples and frequency controlled by the Solid PDP Plan	Specified in the Solid PDP Plan	Specified in the Solid PDP Plan

[a] Corrective Action per section B3-13 when final reported QC samples do not meet the acceptance criteria. Nonconformances do not apply to matrix related exceedances.
[b] May be satisfied using matrix spike duplicate; acceptance criteria applies only to concentrations greater than the PRQLs listed in Table B3-4.

MDL = Method detection limit
QAO = Quality assurance objective
PDP = Performance Demonstration Program
%R = Percent recovery
RPD = Relative percent difference

a. 2. Attachment B3, Table B3-7

TABLE B3-7
SUMMARY OF LABORATORY QUALITY CONTROL SAMPLES AND FREQUENCIES FOR SEMI-VOLATILE ORGANIC COMPOUNDS ANALYSIS

QC Sample	Minimum Frequency	Acceptance Criteria	Corrective Action[a]
Method performance samples	Seven (7) samples initially and four (4) semiannually	Meet Table B3-6 QAOs	Repeat until acceptable
Laboratory duplicates[b]	One (1) per analytical batch	Meet Table B3-6 precision QAOs	Nonconformance if RPDs > values in Table B3-6
Laboratory blanks	One (1) per analytical batch	Analyte concentrations # 3 x MDLs	Nonconformance if analyte concentrations > 3 x MDLs

QC Sample	Minimum Frequency	Acceptance Criteria	Corrective Action[a]
Matrix spikes	One (1) per analytical batch	Meet Table B3-6 accuracy QAOs	Nonconformance if RPDs > values and %Rs outside range in Table B3-6
GC/MS Calibration	DFTPP Tune every 12 hours 5-pt. Initial Calibration initially, and as needed Continuing Calibration every 12 hours	Abundance criteria met as per method Calibrate according to SW-846 Method requirements: %RSD for CCC # 30, %RSD for all other compounds # 15% Average response factor (RRF) used if %RSD # 15, use linear regression if >15; R or R^2 $0.990 if using alternative curve System Performance Check Compound (SPCC) minimum RRF as per SW-846 Method; RRF for all other compounds $ 0.01 %D# 20 for CCC, SPCC minimum RRF as per SW-846 Method; RRF for all other compounds $ 0.01 RT for internal standard must be ± 30 seconds from last daily calibration, internal standard area count must be >50% and <200% of last daily calibration	Repeat until acceptable
GC/ECD Calibration	5 pt. Initial Calibration initially and as needed Continuing Calibration every 12 hours	Correlation Coefficient $ 0.990 or %RSD < 20 for all analytes %D or %Drift for all analytes # 15 of expected values, RT ± 3 standard deviations of initial calibration	Repeat until acceptable
Matrix spike duplicates	One (1) per analytical batch	Meet Table B3-6 accuracy and precision QAOs	Nonconformance if RPDs and %Rs > values in Table B3-6
Laboratory control samples	One (1) per analytical batch	~~80 - 120 %Rs~~ Meet Table B3-6 accuracy QAOs.	Nonconformance if %R < 80 or > 120
Surrogate compounds	Each analytical sample	Average %R from minimum of 30 samples from a given matrix ±3 standard deviations	Nonconformance if %R < (average %R - 3 standard deviations) or > (average %R + 3 standard deviations)
Blind audit samples	Samples and frequency controlled by the Solid PDP Plan	Specified in the Solid PDP Plan	Specified in the Solid PDP Plan

[a] Corrective action per section B3-13 when final reported QC samples do not meet the acceptance criteria. Nonconformances do not apply to matrix related exceedances.

[b] May be satisfied by using matrix spike duplicate; acceptance criteria applies only to concentrations greater than the PRQLs listed in Table B3-6.

MDL = Method Detection Limit
QAO = Quality Assurance Objective
PDP = Performance Demonstration Program
%R = Percent Recovery
RPD = Relative Percent Difference

b. 1. Attachment B3, Table B3-4

Compound	CAS Number	Precision[a] (%RSD or RPD)	Accuracy[a] (%R)	MDL[b] (mg/kg)	PRQL[b] (mg/kg)	Completeness (%)
Benzene	71-43-2	#45	37-151	1	10	90
Bromoform	75-25-2	#47	45-169	1	10	90
Carbon disulfide	75-15-0	#50	60-150	1	10	90
Carbon tetrachloride	56-23-5	#30	70-140	1	10	90
Chlorobenzene	108-90-7	#38	37-160	1	10	90
Chloroform	67-66-3	#44	51-138	1	10	90
1,4-Dichlorobenzene[c]	106-46-7	#60	18-190	1	10	90
ortho-Dichlorobenzene[c]	95-50-1	#60	18-190	1	10	90
1,2-Dichloroethane	107-06-2	#42	49-155	1	10	90
1,1-Dichloroethylene	75-35-4	#250	D-234[d]	1	10	90
Ethyl benzene	100-41-4	#43	37-162	1	10	90
Methylene chloride	75-09-2	#50	D-221[d]	1	10	90
1,1,2,2-Tetrachloroethane	79-34-5	#55	46-157	1	10	90
Tetrachloroethylene	127-18-4	#29	64-148	1	10	90
Toluene	108-88-3	#29	47-150	1	10	90
1,1,1-Trichloroethane	71-55-6	#33	52-162	1	10	90
1,1,2-Trichloroethane	79-00-5	#38	52-150	1	10	90
Trichloroethylene	79-01-6	#36	71-157	1	10	90
Trichlorofluoromethane	75-69-4	#110	17-181	1	10	90
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	#50	60-150	1	10	90
Vinyl chloride	75-01-4	#200	D-251[d]	1	4	90
m-xylene	108-38-3	#50	60-150	1	10	90
o-xylene	95-47-6	#50	60-150	1	10	90
p-xylene	106-42-3	#50	60-150	1	10	90
Acetone	67-64-1	#50	60-150	10[e]	100	90
Butanol	71-36-3	#50	60-150	10[e]	100	90
Ethyl ether	60-29-7	#50	60-150	10[e]	100	90
Formaldehyde[f]	50-00-0	#50	60-150	10[e]	100	90
Hydrazine[g]	302-01-2	#50	60-150	10[e]	100	90
Isobutanol	78-83-1	#50	60-150	10[e]	100	90
Methanol	67-56-1	#50	60-150	10[e]	100	90
Methyl ethyl ketone	78-93-3	#50	60-150	10[e]	100	90
Pyridine[c]	110-86-1	#50	60-150	10[e]	100	90

[a] ~~Criteria apply to PRQL concentrations~~. Applies to laboratory control samples and laboratory matrix spikes. If a solid laboratory control sample material which has established statistical control limits is used, then the established control limits for that material should be used for accuracy requirements.
[b] TCLP MDL and PRQL values are reported in units of mg/l and limits are reduced by a factor of 20.
[c] Can also be analyzed as a semi-volatile organic compound.
[d] Detected; result must be greater than zero.
[e] Estimate, to be determined.
[f] Required only for homogenous solids and soil/gravel from Los Alamos National Laboratory.
[g] Required only for homogenous solids and soil/gravel from Oak Ridge National Laboratory and Savannah River Site.

CAS = Chemical Abstract Service
%RSD = Percent relative standard deviation

Item 9

Description:

Update Emergency Coordinator office telephone numbers. Home telephone numbers and addresses are not to be made available outside of NMED.

Basis:

This modification will ensure that the current office telephone numbers are incorporated in the Permit.

Discussion:

It is necessary that the current Emergency Coordinator(s) telephone numbers be listed so that they may be contacted in the event of an emergency.

Revised Permit Text:

a. 1. Attachment F, Table F-2

Name	Address*	Office Phone	Home Phone*
G. A. (Gerry) Burns (primary)[1]		234-8276 or 234-8635	
R. A. (Richard) Marshall (primary)[1]		234-8276 or 234-8695	
~~K. (Kim) Jackson (primary)[2]~~ M. (Mike) Proctor[2]		~~234-8276 or 234-8453~~ 234-8457	
M. L. (Tex) Winans (primary)[1]		234-8276 or 234-8273	
G. L. (Garrod) Ashford[2]		234-8272	
R. C. (Russ) Stroble[2] (primary)[1]		234-8554	
~~E. R. (Ed) Flynn[2]~~ J.E. (Joseph) Bealler[2]		~~234-8272 or 234-8276~~ 234-8619	
G. L. (Gary) Kessler[2]		234-8326	
A. E. (Alvy) Williams[2]		234-8216 or 234-8276	
P. J. (Paul) Paneral[2]		234-8498	
M. L. (Mark) Long[2]		234-81~~07~~ 70	
D.A. (David) Frye		234-8272 or 234-8761	

*NOTE: Personal information (home addresses and phone numbers) has been removed from information copies of this application.

[1] The on-duty Facility Shift Manager is the primary RCRA Emergency Coordinator pursuant to 20.4.1.500 NMAC ~~4.1.500~~ (incorporating 40 CFR §264.52), and is designated to serve as the RCRA Emergency Coordinator.

[2] The on-duty Facility Operations Engineer is the alternate RCRA Emergency Coordinator and is available as needed.

Item 10

Description:

Remove an additional reference to the financial assurance requirements.

Basis:

This modification will remove an additional reference to the financial assurance requirements which have been revised by NMED.

Discussion:

The NMED recently removed all financial assurance/liability requirements from the Permit. One reference was inadvertently left in place. This modification removes that reference.

Revised Permit Text:

a. 1. Module I.I.9.

All other documents required by Module I, Permit Condition I.E.10~~, and Module II,~~ .

Item 11

Description:

Revise Attachments G and M1 to reflect current operations.

Basis:

This modification will revise Figures G-4, M1-7 and M1-15 to indicate the equipment now in place in the Waste Handling Building.

Discussion:

In an effort to keep the Permit current Figures G-4, M1-7 and M1-15 have been revised to indicate the new, non-regulated equipment within the Waste Handling Building.

Revised Permit Text:

a. 1. Attachment G

See Attachment B for revised Figure G-4

b. 1. Attachment M1

See Attachment B for revised Figures M1-7 and M1-15

Item 12

Description:

Revise Attachments B to reflect the correct terminology.

Basis:

This modification will revise Attachments B and B1. During the submittal of the Class 1 modifications on July 21, 2000 some of the text was inadvertently omitted. This modification will remedy those inconsistencies.

Discussion:

During the preparation of the July 21, 2000 Class 1 modification several words and punctuation marks were inadvertently omitted from the original text. None of these changes affects the original modification, however, in an effort to keep the Permit consistent these changes are required.

Revised Permit Text:

a. 1. Attachment B-4

The Permittees and the generator/storage sites will assure that waste characterization meets WAP requirements through data validation, usability and reporting controls. Verification occurs at three levels: 1) the data generation level, 2) the project level, and 3) the Permittee level. The validation and verification process and requirements at each level is described in Section B3-10.

a. 2. Attachment B-4a(4)

Batch Data Reports, in A a format pre-approved by the Permittees, will be used by each generator/storage site for reporting waste characterization data. This format will be included in the generator/storage site QAPjP, controlled electronic databases, or procedures referenced in the QAPjP (Permit Attachment B5) and will include all of the elements required by this WAP for Batch Data Reports (Permit Attachment B3).

The Permittees shall perform audits of the generator/storage site waste characterization programs, as implemented by the generator/storage site QAPjP, to verify compliance with the WAP, and the DQOs in this WAP,(See Permit Attachment B6 for a discussion of the content of the audit program). The primary functions of these audits are to review generator/storage sites adherence to the requirements of this WAP and assure adherence to the WAP characterization program The Permittees shall provide the results of each audit to NMED. If audit results indicate that a generator/storage site is not in compliance with the requirements of this WAP, the Permittees will take appropriate action(Permit Attachment B6).

a. 3. Attachment B-4a(5)

Batch Data Rreports will document the testing, sampling, and analytical results from the required characterization activities, and document required QA/QC activities. Data validation and verification at both the data generation level and the project level will be performed as required by this Permit before the required data are transmitted to the Permittees (Permit Attachment B3). NMED may request, through the Permittees, copies of any Bbatch Data Report, and/or the raw data validated by the generator/storage sites, to check the Permittees' audit of the validation and verification process.

a. 4. Attachment B-4a(6)

Batch Data Rreports for each container will include the information required by Permit

Attachment B3-10 and will be transmitted by hard copy ~~and/~~or electronically (provided a hard copy is available on demand) from the data generation level to the project level. The generator/storage site will transmit waste container information electronically via the WIPP Waste Information System (WWIS). Data will be entered into the WWIS in the exact format required by the database. ~~See~~ Refer to Section B-4b for WWIS reporting requirements and ~~Appendix C13 of the WIPP RCRA Part B Permit Application (DOE, 1997)~~ the *WIPP Waste Information System User's Manual for Use by Shippers/Generators* (DOE, 1997) for the WWIS data ~~dictionary~~ fields and format requirements.

Once a waste stream is fully characterized, the Site Project Manager will also submit to the Permittees a Waste Stream Profile Form (Figure B-1) accompanied by the Characterization Information Summary for that waste stream which includes reconciliation with DQOs (Section B3-12b(1)). The Waste Stream Profile Form will be used as the basis for acceptance of waste characterization information on TRU mixed wastes to be disposed of at the WIPP.

~~The generator/storage site will transmit waste container information electronically via the WIPP Waste Information System (WWIS). Data will be entered into the WWIS in the exact format required by the database. See Refer to Section B-4b for WWIS reporting requirements and Appendix C13 of the WIPP RCRA Part B Permit Application (DOE, 1997) the *WIPP Waste Information System User's Manual for Use by Shippers/Generators* (DOE, 1997) for the WWIS data~~ dictionary ~~fields and format requirements.~~

a. 5. Attachment B-4a(7)

Records related to waste characterization activities at the generator/storage sites will be maintained in the testing, sampling, or analytical facility files or generator/storage site project files. Contract laboratories will forward testing, sampling, and analytical records along with Batch Data Reports, to the generator/storage site project office for inclusion in the generator/storage site's project files. Raw data obtained by testing, sampling, and analyzing TRU mixed waste in support of this WAP will be identifiable, legible, and provide documentary evidence of quality.

a. 6. Attachment B-4b(1)

The first phase of the waste screening and verification process will occur before TRU mixed waste is shipped to the WIPP facility. Before the Permittees begin the process of accepting TRU mixed waste from a generator/storage site, an initial audit of that generator/storage site will be conducted as part of the Permittees' Audit and Surveillance Program (Permit Attachment B6). The RCRA portion of the generator/storage site audit program will provide on-site verification of characterization procedures; Batch Data Report preparation; and recordkeeping to ensure that all applicable provisions of the WAP requirements are met. Another portion of the Phase I verification is the Waste Stream Profile Form approval process. At the WIPP facility, this process includes verification that all of the required elements of a Waste Stream Profile Form are present and that the summarized waste characterization information meet acceptance criteria required for compliance with the WAP (Section B3-12b(1)).

Item 13

Description:

Revise Attachments B1 to reflect the correct terminology.

Basis:

This modification will revise Attachments B1. The NMED inadvertently changed the text within Attachment B1 while revising the Permit to incorporate changes submitted within the Class 2 modification of March 30, 2000.

Discussion:

During the revision of the Permit changes were incorporated in this document which do not correlate with the Class 2 modification submitted on March 30, 2000 (Item 3H). This modification will replace the text correctly. There is no indication that NMED intended to incorporate this change into the Permit.

Revised Permit Text:

a. 1. Attachment B1-1a

(Class 2 modification submittal text–Item 3H)

The Permittees shall require all headspace-gas sampling be performed in an appropriate radiation containment area on waste containers that are in compliance with the container equilibrium requirements (i.e. 72 hours at 18E C or higher). All waste containers or randomly selected containers from waste streams that meet the conditions for reduced headspace gas sampling listed in Section B-3a(1) designated as summary category S5000 (Debris waste) shall be sampled for headspace gas a minimum of 142 days after packaging. ~~and all~~ All waste containers or randomly selected containers from waste streams that meet the conditions for reduced headspace gas sampling listed in Section B-3a(1) designated as summary categories S3000 (Homogenous solids) and S4000 (Soil/gravel) shall be sampled a minimum of 225 days after packaging. This drum age criteria is to ensure that the drum contents have reached 90 percent of steady state concentration within each layer of confinement (Lockheed, 1995). The equilibrium time and drum age of all containers from which a headspace gas sample is collected will be documented in headspace gas sampling documents. All waste containers with unvented rigid containers greater than 4 liters shall be subject to innermost layer of containment sampling or shall be vented prior to initiating drum age and equilibrium criteria. The configuration of the containment area and remote-handling equipment at each sampling facility are expected to differ. Headspace-gas samples will be analyzed for the analytes listed in Table B3-2 of Permit Attachment B3.

(Text incorporated by NMED into the Permit)

The Permittees shall require all headspace-gas sampling be performed in an appropriate radiation containment area on waste containers that are in compliance with the container equilibrium requirements (i.e. 72 hours at 18E C or higher). All waste containers designated as summary category S5000 (Debris waste) shall be sampled for headspace gas a minimum of 142 days after packaging. ~~and all~~ All waste containers or randomly selected containers from waste streams that meet the conditions for reduced headspace gas sampling listed in Section B-3a(1) designated as summary categories S3000 (Homogenous solids) and S4000 (Soil/gravel) shall be sampled a minimum of 225 days after packaging. This drum age criteria is to ensure that the drum contents have reached 90 percent of steady state concentration within each layer of confinement (Lockheed, 1995). The equilibrium time and drum age of all containers from which a headspace gas sample is collected will be documented in headspace gas sampling documents. All waste containers with unvented rigid containers greater than 4 liters shall be

subject to innermost layer of containment sampling or shall be vented prior to initiating drum age and equilibrium criteria. The configuration of the containment area and remote-handling equipment at each sampling facility are expected to differ. Headspace-gas samples will be analyzed for the analytes listed in Table B3-2 of Permit Attachment B3.

Item 14

Description:

a. Revise Attachment N to reflect an updated sampling method

b. Revise Attachment N to indicate a standardized method of quantitation.

c. Revise Attachment N to reflect the current mechanism by which data are collected and maintained.

Basis:

a. This modification will revise Attachments N to allow the use of EPA Compendium Method TO-14A in lieu of TO-14.

b. This modification will allow DOE to use the most current mechanism by which to quantify sample target analytes.

c. This modification will rectify the HWFP to reflect the mechanism by which certain field sampling information is recorded.

Discussion:

a. The current SUMMA canister sample collection method recommended by the USEPA is Compendium Method TO-14A. Both the USEPA and NMED have stated that the WIPP facility should use the most updated methods currently available. This revision will allow WIPP to begin use of TO-14A for the collection of VOC's employing SUMMA canisters.

b. The National Environmental Laboratory Accreditation Conference (NELAC) is sponsored by the USEPA as an organization of state and federal agencies whose intent is to develop quality standards to be used in accrediting environmental laboratories. The basis of the NELAC quality systems are guidance documents from the International Standards Organization (ISO). In their Quality Systems document it is stated "initial instrument calibration is directly used for quantitation and continuing instrument calibration verification is used to confirm the continued validity of the initial calibration."

By changing the requirements to quantitate using initial calibration the DOE will be following bot USEPA and industry's attempt to promote acceptable performance standards for the inspection and operation of environmental laboratories.

c. It is the intent of this modification to allow both temperature and pressure information to be collected electronically and transferred to a spreadsheet for averaging. The final data are documented in a logbook and used in the normalization calculations. Both temperature and pressure data are collected every fifteen minutes during sampling events. However, this data is collected electronically and therefore not recorded manually on sampling data sheets. Section N-5e of the HWFP requires that "Sample collection conditions, maintenance, and calibration activities will be included in this logbook. Additional data collected by other groups at WIPP, such as ventilation airflow, temperature, pressure, etc. will be obtained to document the sampling conditions as necessary." There is no mention in the HWFP which requires the information be documented on sampling data sheets.

Revised Permit Text:

a. 1. Attachment N-3c

The method that will be used for VOC sampling is based on the concept of pressurized sample collection contained in the U.S. Environmental Protection Agency (EPA) Compendium Method TO-14A (EPA, ~~1988~~ 1997a; Winberry and others, 1990). The TO-14A sampling concept uses 6-liter SUMMA® passivated stainless-steel canisters to collect integrated air samples at each sample location. This conceptual method will be used as a reference for collecting the samples at WIPP. The samples will be analyzed using gas chromatography/mass spectrometry (GC/MS) under an established QA/quality control (QC) program. Laboratory analytical procedures have

been developed based on the concepts contained in both TO-14A and the draft *EPA Contract Laboratory Program - Statement of Work* (CLP-SOW) *for Volatile Organics Analysis of Ambient Air in Canisters* (EPA, 1994). Section N-5 contains additional QA/QC information for this project.

The TO-14A method is an EPA-recognized sampling concept for VOC sampling and speciation. It can be used to provide integrated samples, or grab samples, and compound quantitation for a broad range of concentrations. The sampling system can be operated unattended but requires detailed operator training.

The field sampling systems will be operated in the pressurized mode. In this mode, air is drawn through the inlet and sampling system with a pump. The air is pumped into an initially evacuated SUMMA® passivated canister by the sampler, which regulates the rate and duration of sampling. The passivation process forms a pure chrome-nickel oxide on the interior surfaces of the canisters. ~~At~~ By the end of each sampling period, the canisters will be pressurized to about two atmospheres absolute. In the event of shortened sampling periods or other sampling conditions, the final pressure in the canister may be less than two atmospheres absolute. Sampling duration will be approximately six hours, so that a complete sample can be collected during a single work shift.

a. 2. Attachment N-4a(1)

Six-liter, stainless-steel canisters with SUMMA® passivated interior surfaces will be used to collect and store all ambient air and gas samples for VOC analyses collected as part of the monitoring processes. These canisters will be cleaned and certified prior to their use, in a manner similar to that described by Compendium Method TO-14A and the draft EPA CLP-SOW for Analysis of Ambient Air in Canisters (EPA, 1994). The canisters will be certified clean to below the required reporting limits for the VOC analytical method for the target VOCs (see Table N-4). The vacuum of certified clean samplers will be verified at the sampler upon initiation of a sample cycle.

a. 3. Attachment N-4a(2)

A conceptual diagram of a VOC sample collection unit is provided in Figure N-2.Two such systems, located at monitoring Stations VOC-A and VOC-B, will be operational at the time waste disposal operations begin in Panel 1. The sampling system consists of a sample pump, flow controller, sample inlet, two inlet filters in series to remove particulate matter, vacuum/pressure gauge, electronic timer, inlet purge vent, two sampling ports, and sufficient collection canisters so that any delays attributed to laboratory turnaround time and canister cleaning and certification will not result in canister shortages. Knowledge of sampler flow rates and duration of sampling will allow calculation of sample volume. The set point flow rate will be verified before and after sample collection from the mass flow indication. Prior to their initial use and annually thereafter, the sample collection units will be tested and certified to demonstrate that they are free of contamination above the reporting limits of the VOC analytical method (see Section N-5). Ultra-high purity humidified zero air will be pumped through the inlet line and sampling unit and collected in previously certified canisters as sampler blanks for analysis. The cleaning and certification procedure is derived from concepts contained in the EPA Compendium Method TO-14A (EPA, ~~1988~~ 1997a, Winberry and others, 1990).

a. 4. Attachment N-4e

Analytical procedures used in the analysis of VOC samples from canisters are based on concepts contained in Compendium Method TO-14A (EPA, ~~1988~~ 1997a, Winberry and others, 1990) and in the draft CLP-SOW for Analysis of Ambient Air (EPA, 1994). The technical

approach for canister sample analysis is summarized below.

a. 5. Attachment N-5d

The analytical procedures for the Confirmatory VOC Monitoring Program, which are based on the draft *CLP-SOW for Volatile Organics Analysis of Ambient Air in Canisters* (EPA, 1994) and EPA Method TO-14A (EPA, ~~1988~~ 1997a, Winberry and others, 1990), are outlined in Section N-4e.

a. 6. Attachment N-6

U.S. Environmental Protection Agency. ~~1988~~ 1997a. *Compendium Method TO-14A: The Determination of Volatile Organic Compounds (VOCs) in Ambient Air Using SUMMA Passivated Canister Sampling and Gas Chromatographic Analysis*, EPA/600/4-89/017. Quality Assurance Division, Environmental Monitoring Systems Laboratory, Research Triangle Park, North Carolina, June 1988

b. 1. Attachment N-4e(6)

Sample target analyte concentrations will be quantified using the ~~mid-range~~ average relative response factor of the initial calibration standards and will be reported in ppbv. Non-target sample contaminants identified by NIST library searches will be reported as tentatively identified compounds, and concentration calculations will be based on the response of the nearest internal standard. The relative response factor used for quantitation, as well as copies of spectra with the library search results (purity and/or fit), will be submitted with the results. A table listing the run sequence with the corresponding internal standard area counts will be reported with the analytical results. A narrative describing any problems with sample analyses will be included. Any nonconformances must be included with the reporting of the data.

c. 1. Attachment N-4c

Field sampling data sheets will be used to document the sampler conditions under which each sample is collected. These data sheets have been developed specifically for VOC monitoring at the WIPP facility. The individuals assigned to collect the specific samples will be required to fill in all of the appropriate sample data and to maintain this record in sample logbooks. The program team leader will review these forms for each sampling event.

Item 15

Description

Revise the underground log sheets and procedures to adequately reflect current operations.

Basis:

This change revises a procedure and logs to more adequately reflect current operations.

Discussion:

This modification revises various log sheets to reflect the actual personnel who have reviewed these log sheets.

Revised Permit Text:

a. 1. Attachment D1

See Attachment B for revisions to the AIS Hoist Operator's Log, Salt Hoist Operator's Log and Waste Hoist Operator's Log.

Item 16

Description

Revise Module IV to ensure consistency throughout the Permit.

Basis:

Class 1 modifications submitted on July 20, 2000 inadvertently left Module IV unchanged. This modification will correct that error.

Discussion:

This modification revises Module IV.C.1 to include the acceptability of 100 gallon drums for disposal in the repository.

Revised Permit Text:

a. 1. Module IV.C.1.

Acceptable Disposal Containers

The Permittees shall use containers that comply with the requirements for U.S. Department of Transportation shipping container regulations (49 CFR §173 - Shippers - General Requirements for Shipment and Packaging, and 49 CFR §178 - Specifications for Packaging) for disposal of TRU mixed waste at WIPP. The Permittees are prohibited from disposing TRU mixed waste in any container not specified in Permit Attachment M1, Section M1-1b, as set forth below:

IV.C.1.a	Standard 55-gallon (208-liter) drum - configured as a 7-pack or as an individual unit.
IV.C.1.b	Standard waste box (**SWB**) - as an individual unit.
IV.C.1.c	Ten-drum overpack (**TDOP**) - as an individual unit.
IV.C.1.d	85-gallon (322-liter) drum overpack - configured as a 4-pack or as an individual unit.
IV.C.1.e	100 gallon (379-liter) drum - configured as a 3-pack or as an individual unit.

Item 17

Description:

Revise Attachments F, I and M2 to reflect current operations

Basis:

WIPP is planning to reactivate the experimental area underground which requires the modification to various figures contained in the aforementioned Attachments.

Discussion:

In order to perform underground astrophysics experiments regarding neutrinos it is necessary to revise various figures within the Permit. Figures F-2; F-3; F-5; F-9; I-6 and M2-2 will be revised to reflect an experimental area within the underground. This area has always been used for underground experiments but was indicated as "(Deactivated, September, 1996)". This modification will revise those figures as required.

Revised Permit Text:

a. 1. Attachment F

See Attachment B for revised Figures F-2, F-3, F-5 and F-9

b. 1. Attachment I

See Attachment B for revised Figure I-6

c. 1. Attachment M2

See Attachment B for revised Figure M2-2

ATTACHMENT B
SUPPORTING INFORMATION

Item 2. a. Revised Figure H-1

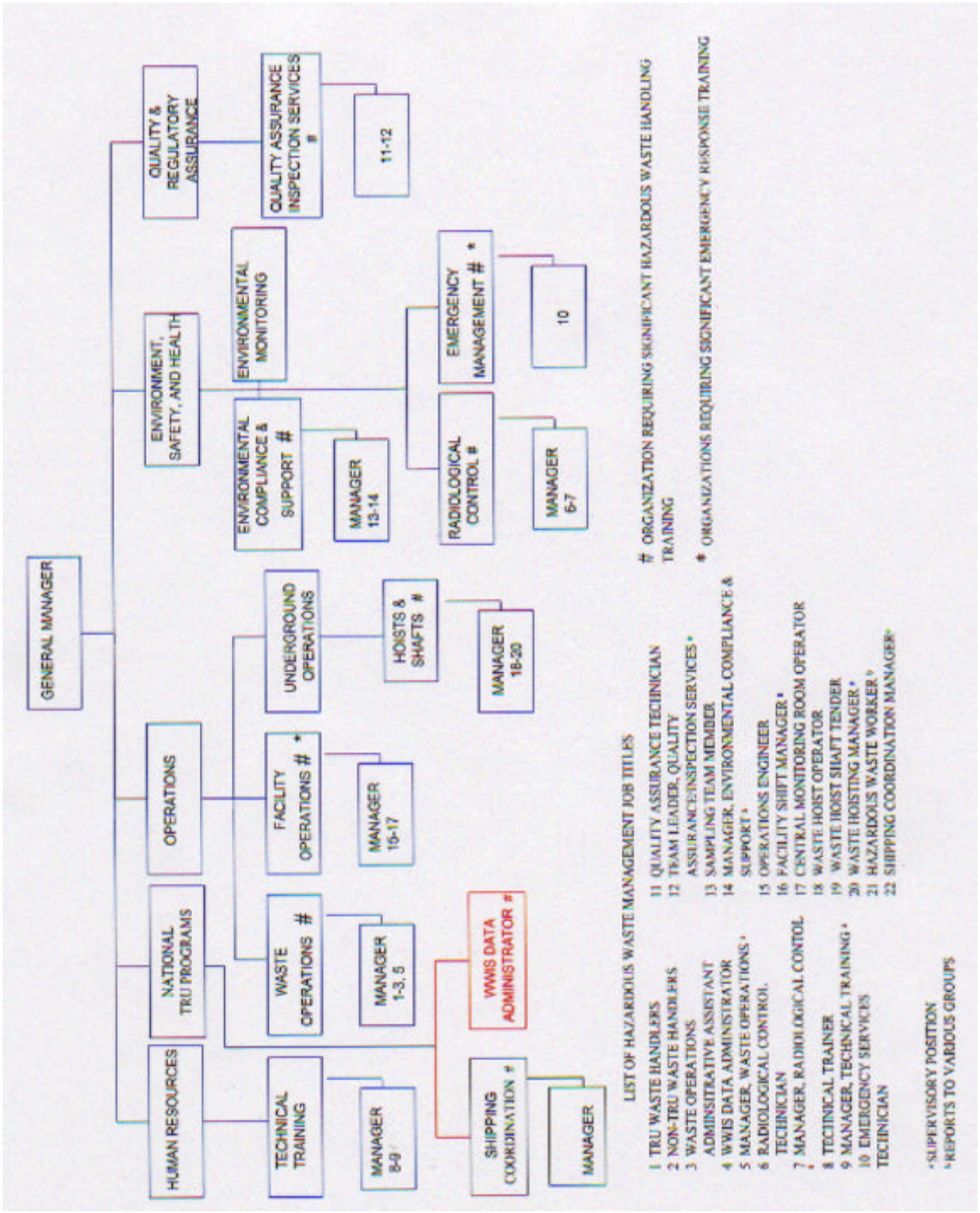

Figure H-1
Organizational Location of Training, Waste Handling, and Emergency Response Functions

Item 3. a. Revised Figures F-1; F-1a; F-6 and F-8

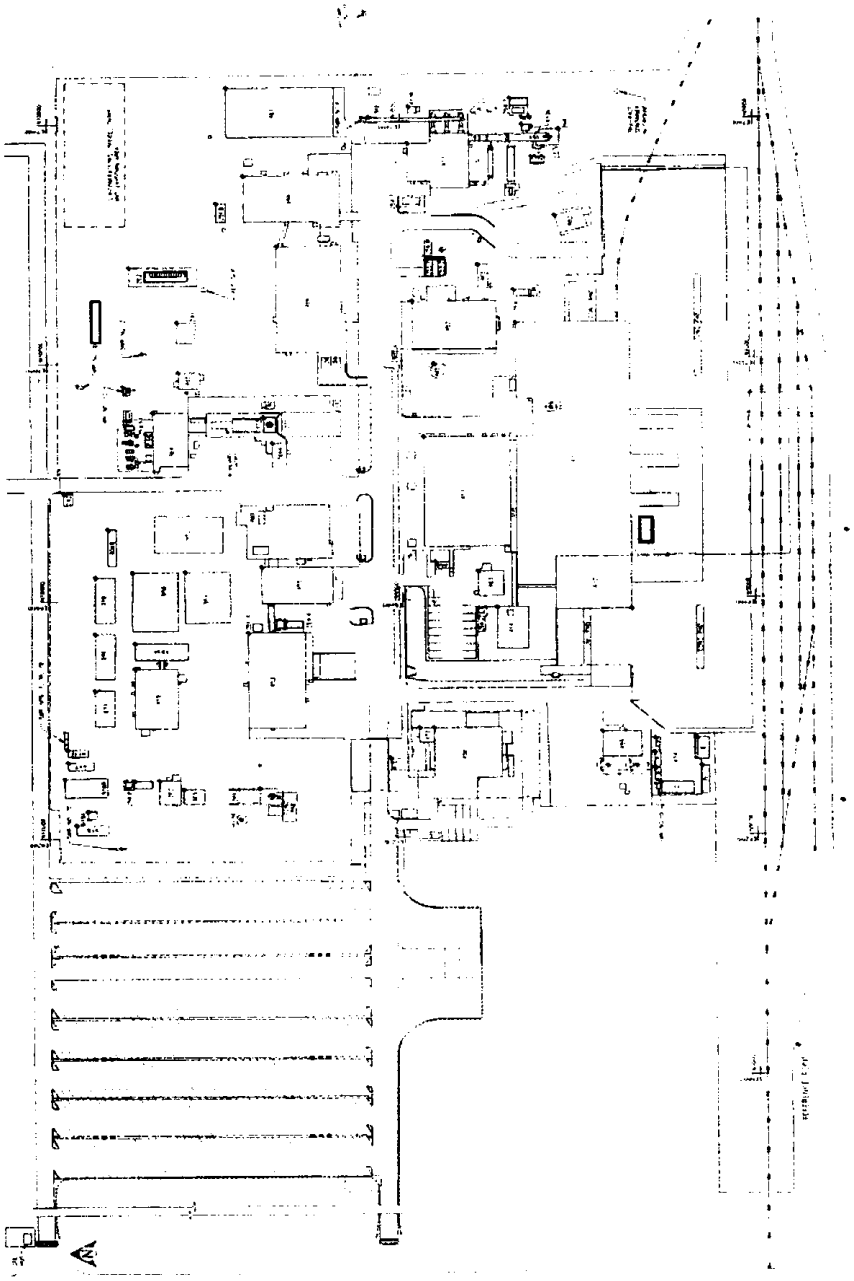

Figure F-1
WIPP Surface Structures

FACILITIES, USAGE AND STRUCTURE NUMBERS

BLDG./ FAC. #	DESCRIPTION
#241	EQUIPMENT SHED
#242	GUARDSHACK
#253	13.8 KV SWITCHGEAR 25P-SWG15/1
#254.1	AREA SUBSTATION NO.1 25P-SWG5.1
#254.2	AREA SUBSTATION NO.2 25P-SWG5.2
#254.3	AREA SUBSTATION NO.3 25P-SWG5.3
#254.4	AREA SUBSTATION NO.4 25P-SWG5.4
#254.5	AREA SUBSTATION NO.5 25P-SWG5.5
#254.6	AREA SUBSTATION NO.6 25P-SWG5.6
#254.7	AREA SUBSTATION NO.7 25P-SWG5.7
#254.8	AREA SUBSTATION NO.8 25P-SWG5.8
#254.9	480V SWITCHGEAR (25P-SWG04.2)
#254.1	BACK-UP DIESEL GENERATOR #1 25-PE-503
#254.2	BACK-UP DIESEL GENERATOR #2 25-PE-504
#254.4	SWITCHBOARD #4 (25P-SBD04.4)
#311	WASTE SHAFT
#351	EXHAUST SHAFT
#361	AIR INTAKE SHAFT
#362	AIR INTAKE SHAFT/HOIST HOUSE
#363	AIR INTAKE SHAFT/WINCH HOUSE
#364	EFFLUENT MONITORING INSTRUMENT SHED A
#365	EFFLUENT MONITORING INSTRUMENT SHED B
#366	AIR INTAKE SHAFT HEADFRAME
#371	SALT HANDLING SHAFT
#372	SALT HANDLING SHAFT HEADFRAME
#384	SALT HANDLING SHAFT HOISTHOUSE
#384A	MINING OPERATIONS
#411	WASTE HANDLING BUILDING
#412	TRUPACT MAINTENANCE BUILDING
#413	EXHAUST SHAFT FILTER BUILDING
#413A	MONITORING STATION A
#413B	MONITORING STATION B
#414	WATER CHILLER FACILITY & BLDG
#451	SUPPORT BUILDING
#452	SAFETY & EMERGENCY SERVICES FACILITY
#453	WAREHOUSE/SHOPS BUILDING
#455	AUXILIARY WAREHOUSE BUILDING
#456	WATER PUMPHOUSE
#457	WATER TANK 25-0-001A
#457	WATER TANK 25-0-001B
#458	GUARD AND SECURITY BUILDING
#459	CORE STORAGE BUILDING
#459A	SANDIA ANNEX
#463	COMPRESSOR BUILDING
#465	AUXILIARY AIR INTAKE
#468	TELEPHONE HUT
#473	ARMORY BUILDING
#474	HAZARDOUS WASTE STORAGE FACILITY
#474A	HAZARDOUS WASTE STORAGE BUILDING
#474B	HAZARDOUS WASTE STORAGE BUILDING
#474C	OIL & GREASE STORAGE BUILDING
#474D	GAS BOTTLE STORAGE BUILDING
#474E	HAZARD MATERIAL STORAGE BUILDING
#474F	WASTE OIL RETAINER
#475	GATEHOUSE
#480	VEHICLE FUEL STATION
#481	WAREHOUSE ANNEX
#485	EXHAUST SHAFT HOIST EQUIP. WAREHOUSE
#485	SULLAIR COMPRESSOR BUILDING
#486	ENGINEERING BUILDING
#487	TRAINING BUILDING
#H-16	SANDIA TEST WELL
#9088	UNIVERSITY CONSORTIUM TRAILER
#910	ENVIRONMENTAL MONITORING TRAILER
#911E	SANDIA TRAILER

BLDG./ FAC. #	DESCRIPTION
#217	AIR MONITORING
#918	VOC TRAILER
#918A	VOC AIR MONITORING STATION
#918B	VOC LAB TRAILER
#950	WIPP CONTROL TRAILER
#951	PROCUREMENT/PURCHASING
#963	TRAILER
#965	SAMPLE LABORATORY TRAILER
#971	HUMAN RESOURCES TRAILER
#986	PUBLICATIONS & PROCEDURES TRAILER
SWP NO.1	SWITCHRACK NO. 1
SWP NO.2	SWITCHRACK NO. 2
SWP NO.6	SWITCHRACK NO. 6
SWP NO.7,7A,7B	SWITCHRACK NO. 7, 7A, 7B
SWP NO.7C	SWITCHRACK NO. 7C
SWP NO.8	SWITCHRACK NO. 8
SWP NO.10	SWITCHRACK NO. 10
SWP NO.11	SWITCHRACK NO. 11
SWP NO.12	SWITCHRACK NO. 12
SWP NO.15	SWITCHRACK NO. 15

Figure F-1a
Legend to Figure F-1

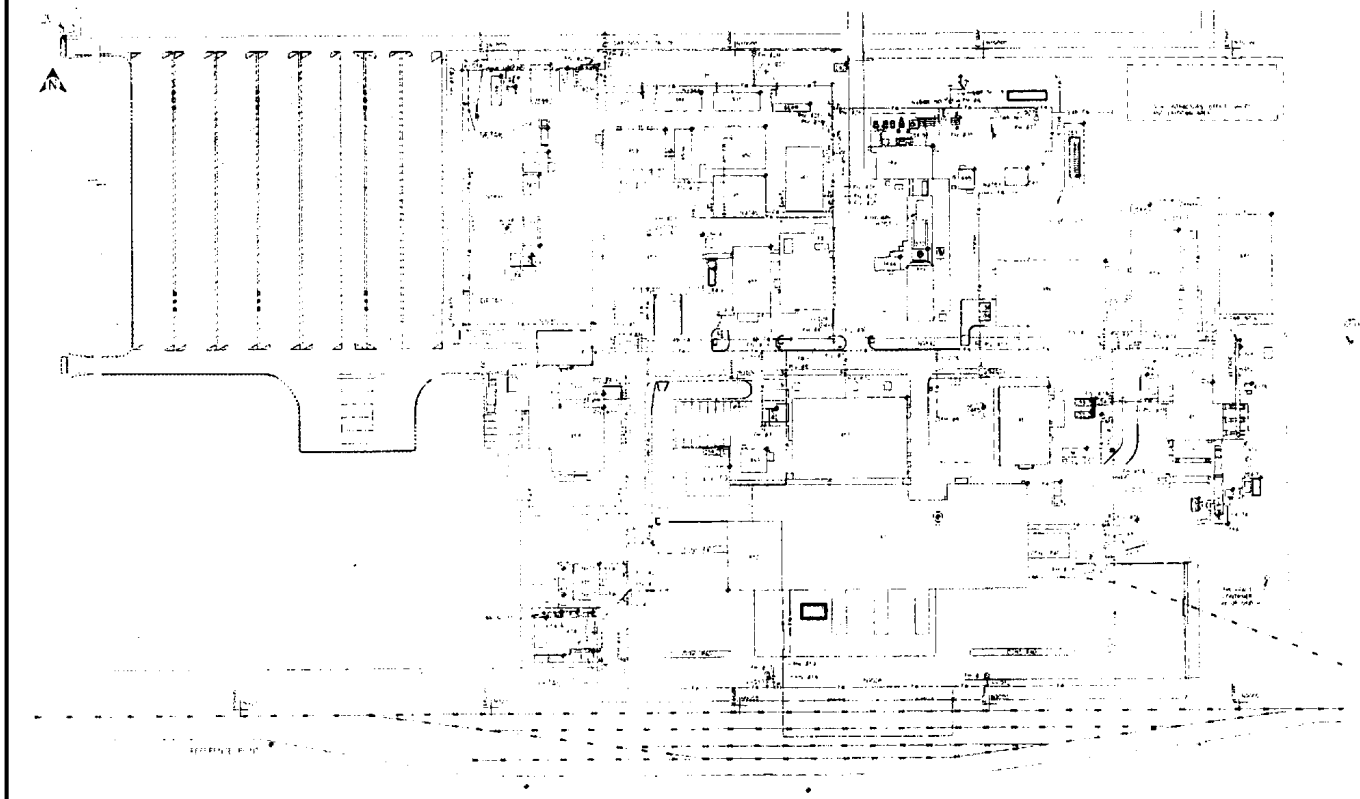

Figure F-6
Fire-Water Distribution System

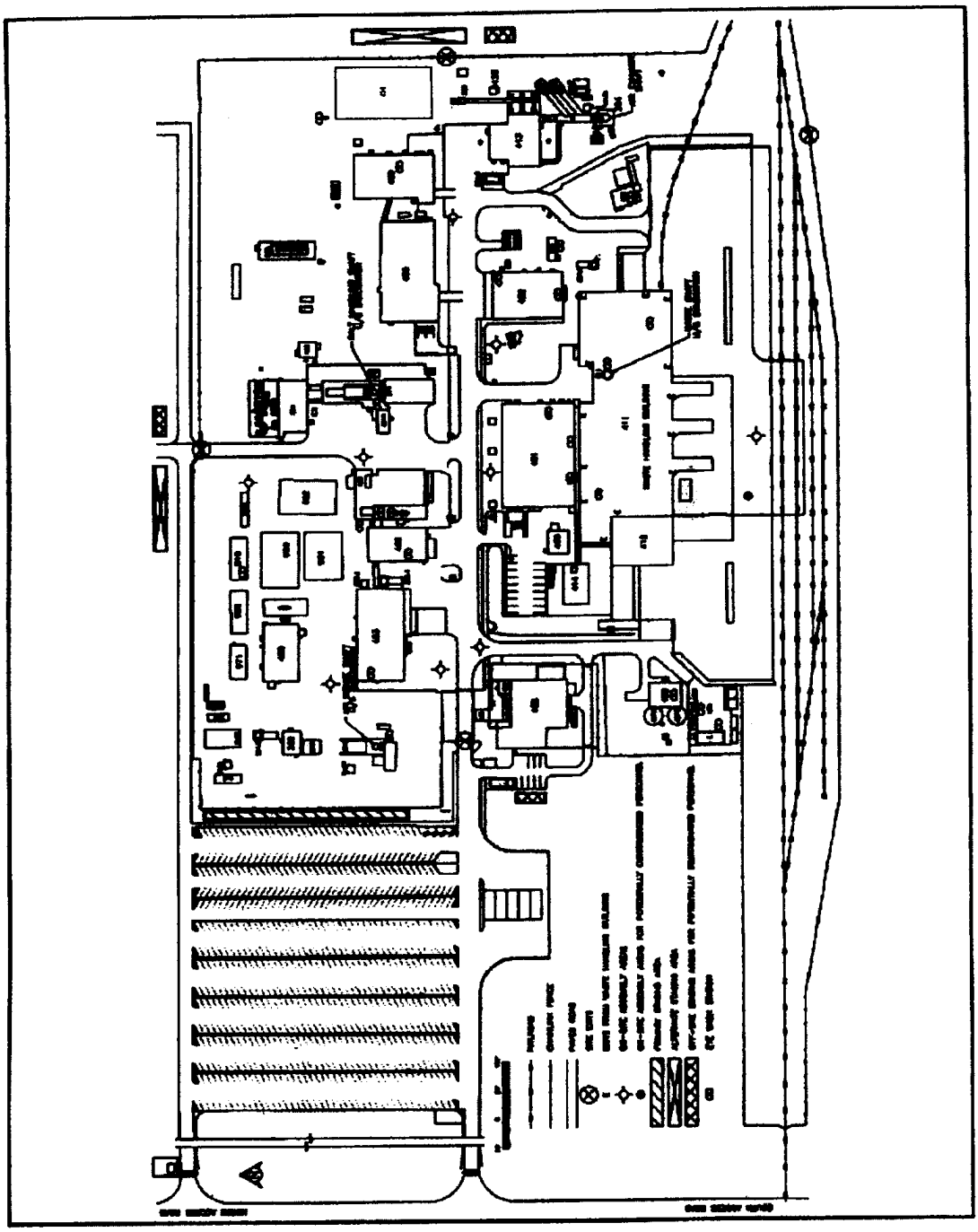

Figure F-8
WIPP On-Site Assembly Areas and WIPP Staging Areas

Item 3. b. Revised Figure G-2

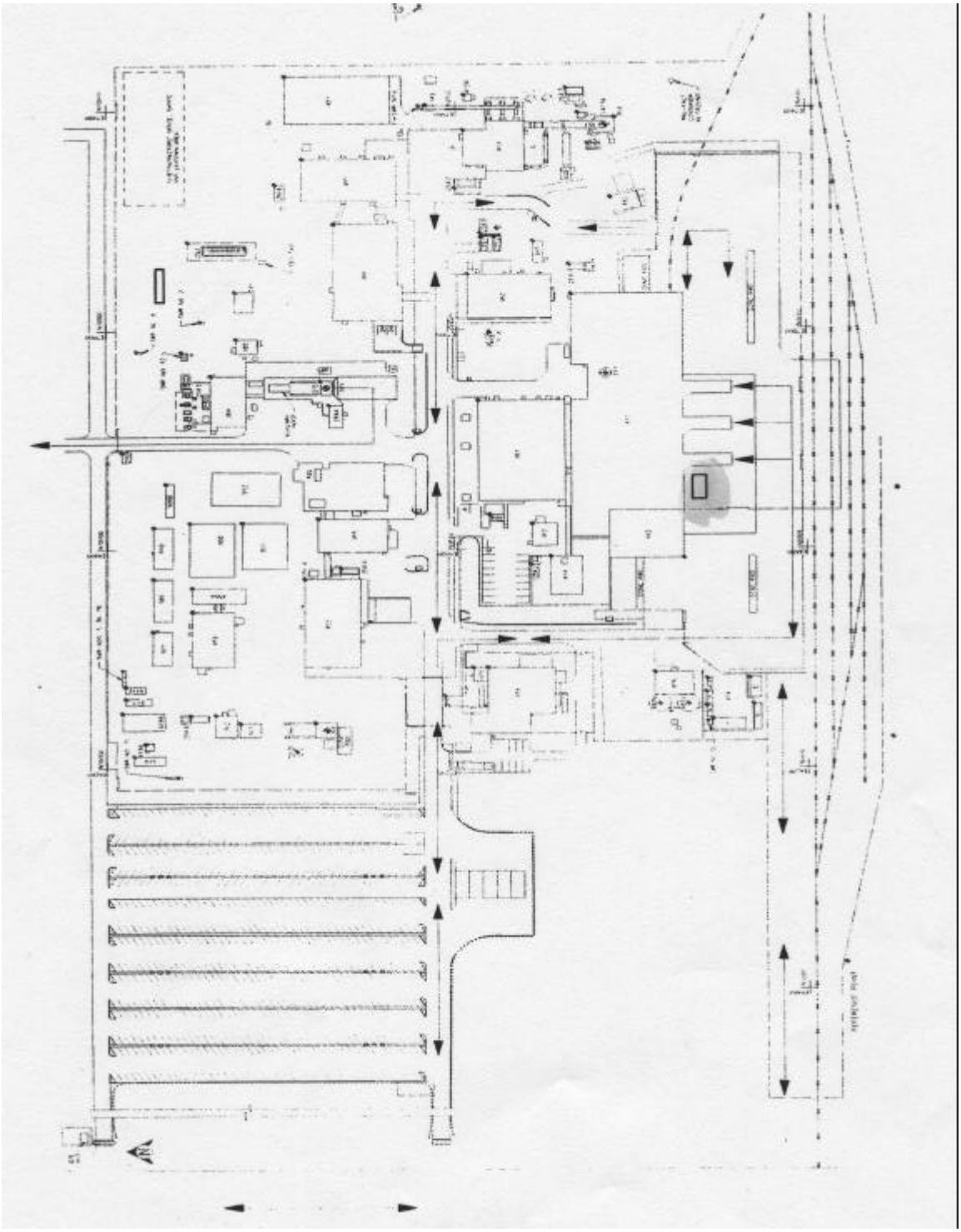

Figure G-2
Waste Traffic Flow Diagram

Item 11. a. Revised Figure G-4

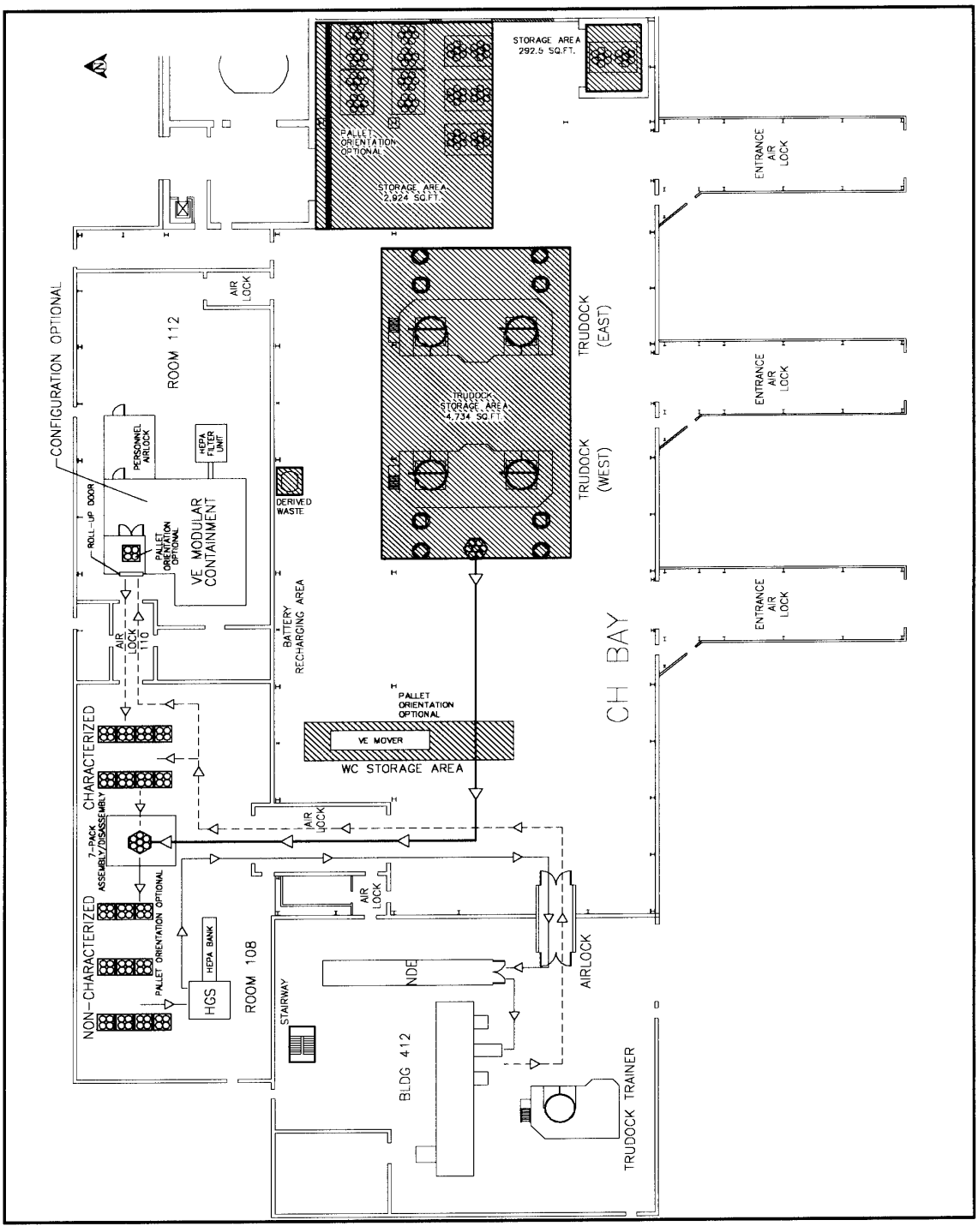

Figure G-4
Waste Transportation Routes in the Waste Handling Building - Waste Characterization Process

Item 11. b. Revised Figure M1-7

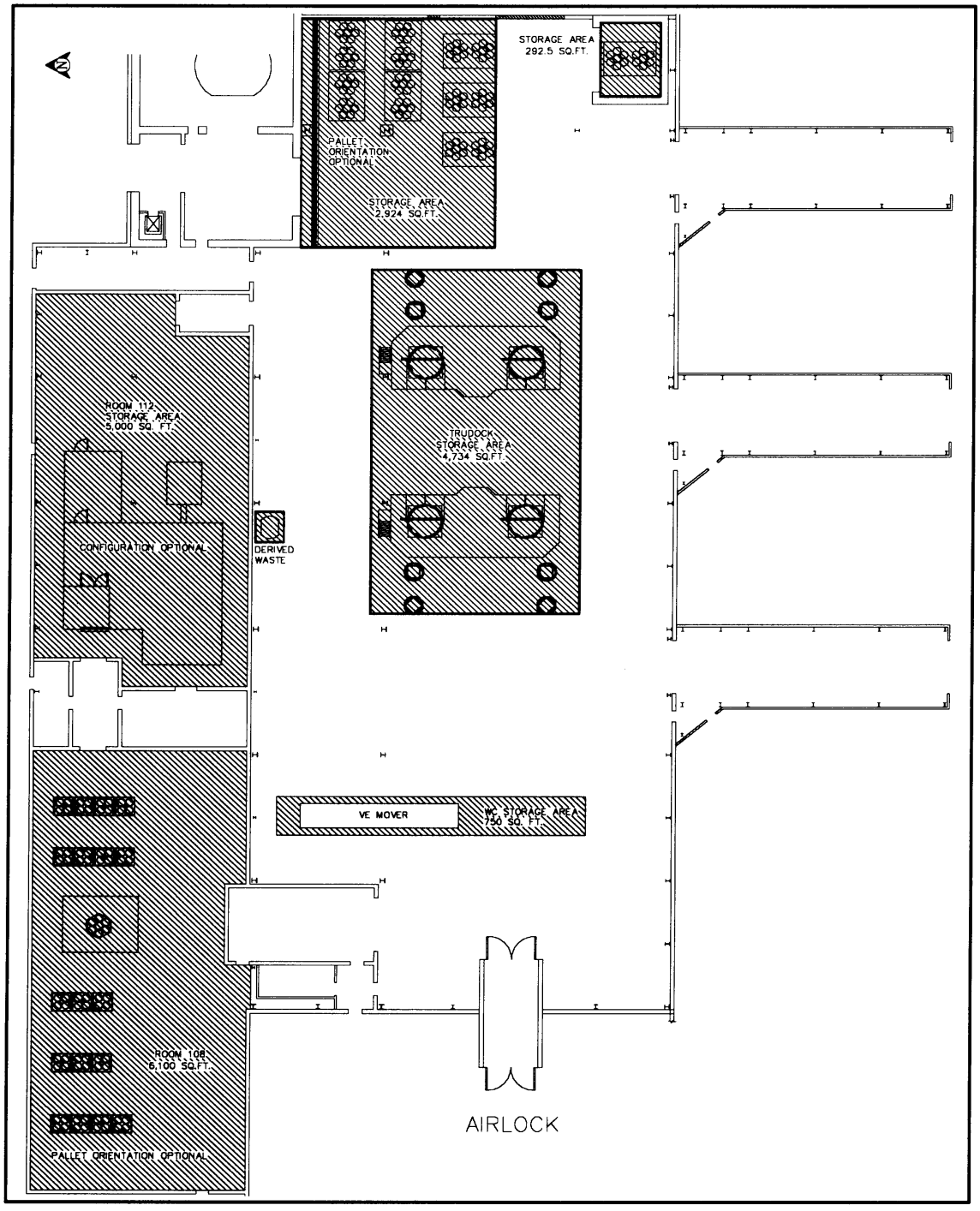

Figure M1-7
Waste Handling Building - Facility Pallet Temporary Storage Area

Item 15. a. Revised Hoist Logs

SALT HOIST OPERATOR'S LOG

DATE: _____

NIGHT SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.

I tested the hoist brakes at _____ (time) and report as follows: _____

I have tested the overwinds at _____ (time), and report as follows: _____

I made the following trial trips and report as follows (give time) _____

The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____

The working condition of the signaling equipment was as follows: _____

Hoistman _____ Reviewed by: _____

Salt Hoist Inspection		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Brake Paths - Clean	☐		
3 Hoist Bearings - Oil Flow	☐		
4 Pump Reservoir - Oil Level	☐		
5 Air Brake Oilers - Oil Level	☐		
6 Lilly Controller - Functional	☐		
7 Drain Receivers/Dryer	☐		
8 Hoist Mtr. Vent. - Functional	☐		
9 Hoist Gen.-No loose Connections	☐		
10 Notified CMR - Hoist Operable	☐		
		TIME	
Comments: _____			
Hoistman _____ Time _____			

Salt Collar Inspection			
1 Examination of Work Area	☐		
2 Rope Connection - No Slippage	☐		
3 Safety Gates - No Damage	☐		
4 Top Roller & Shoes - No Damage	☐		
5 Conveyance Doors - No Damage	☐		
6 Cage Welds - No Damage	☐		
7 BTM Roller & Shoes - No Damage	☐		
8 Cage Phone - Functional	☐		
9 Safety Dogs - No Damage	☐		
10 Bell Signal - No Damage	☐		
11 Mine Phone - Functional	☐		
Comments: _____			
Toplander _____ Time _____			

Salt Station Inspection			
1 Examination of Work Area	☐		
2 Station Steel - No Damage	☐		
3 Safety Gates - No Damage	☐		
4 Load Pocket - Oilers & Grease	☐		
5 Load Pocket - Drain Air Line	☐		
6 Sump Fan - Functional	☐		
7 Mine Phone - Functional	☐		
8 Bell Signal - Functional	☐		
Comments: _____			
Bottomlander _____ Time _____			

DAY SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.

I tested the hoist brakes at _____ (time) and report as follows: _____

I have tested the overwinds at _____ (time), and report as follows: _____

I made the following trial trips and report as follows (give time) _____

The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____

The working condition of the signaling equipment was as follows: _____

Hoistman _____ Reviewed by: _____

Salt Hoist Inspection		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Brake Paths - Clean	☐		
3 Hoist Bearings - Oil Flow	☐		
4 Pump Reservoir - Oil Level	☐		
5 Air Brake Oilers - Oil Level	☐		
6 Lilly Controller - Functional	☐		
7 Drain Receivers/Dryer	☐		
8 Hoist Mtr. Vent. - Functional	☐		
9 Hoist Gen.-No loose Connections	☐		
10 Notified CMR - Hoist Operable	☐		
		TIME	
Comments: _____			
Hoistman _____ Time _____			

Salt Collar Inspection			
1 Examination of Work Area	☐		
2 Rope Connection - No Slippage	☐		
3 Safety Gates - No Damage	☐		
4 Top Roller & Shoes - No Damage	☐		
5 Conveyance Doors - No Damage	☐		
6 Cage Welds - No Damage	☐		
7 BTM Roller & Shoes - No Damage	☐		
8 Cage Phone - Functional	☐		
9 Safety Dogs - No Damage	☐		
10 Bell Signal - No Damage	☐		
11 Mine Phone - Functional	☐		
Comments: _____			
Toplander _____ Time _____			

Salt Station Inspection			
1 Examination of Work Area	☐		
2 Station Steel - No Damage	☐		
3 Safety Gates - No Damage	☐		
4 Load Pocket - Oilers & Grease	☐		
5 Load Pocket - Drain Air Line	☐		
6 Sump Fan - Functional	☐		
7 Mine Phone - Functional	☐		
8 Bell Signal - Functional	☐		
Comments: _____			
Bottomlander _____ Time _____			

MID SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.

I tested the hoist brakes at _____ (time) and report as follows: _____

I have tested the overwinds at _____ (time), and report as follows: _____

I made the following trial trips and report as follows (give time) _____

The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____

The working condition of the signaling equipment was as follows: _____

Hoistman _____ Reviewed by: _____

Salt Hoist Inspection		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Brake Paths - Clean	☐		
3 Hoist Bearings - Oil Flow	☐		
4 Pump Reservoir - Oil Level	☐		
5 Air Brake Oilers - Oil Level	☐		
6 Lilly Controller - Functional	☐		
7 Drain Receivers/Dryer	☐		
8 Hoist Mtr. Vent. - Functional	☐		
9 Hoist Gen.-No loose Connections	☐		
10 Notified CMR - Hoist Operable	☐		
		TIME	
Comments: _____			
Hoistman _____ Time _____			

Salt Collar Inspection			
1 Examination of Work Area	☐		
2 Rope Connection - No Slippage	☐		
3 Safety Gates - No Damage	☐		
4 Top Roller & Shoes - No Damage	☐		
5 Conveyance Doors - No Damage	☐		
6 Cage Welds - No Damage	☐		
7 BTM Roller & Shoes - No Damage	☐		
8 Cage Phone - Functional	☐		
9 Safety Dogs - No Damage	☐		
10 Bell Signal - No Damage	☐		
11 Mine Phone - Functional	☐		
Comments: _____			
Toplander _____ Time _____			

Salt Station Inspection			
1 Examination of Work Area	☐		
2 Station Steel - No Damage	☐		
3 Safety Gates - No Damage	☐		
4 Load Pocket - Oilers & Grease	☐		
5 Load Pocket - Drain Air Line	☐		
6 Sump Fan - Functional	☐		
7 Mine Phone - Functional	☐		
8 Bell Signal - Functional	☐		
Comments: _____			
Bottomlander _____ Time _____			

SPECIAL INSTRUCTIONS

Requires Time, Date, & Authorized Signatures

_____

_____

_____

WP 04-HO1002-1

Salt Hoist Operator's Log
WP 04-HO1002-1

SALT HOIST OPERATOR'S LOG

SHAFT INSPECTION RECORD

Date_____ Craft _____

Weekly Inspection FAC. 371

Items Examined	OK	SEE COMMENTS
CAGE PHONE BATTERY (CHANGED)		
ROPE PHONE ANTENNA		
CONVEYANCE (LUBED)		
GUIDES & ATTACHMENTS		
COLLARS & SUMP STEEL		
SHAFT LINER		
WATER RINGS & DRAINS		
WALL ROCK & BROW		
CONVEYANCE CLEARANCE		
CABLE, PIPES & SUPPORTS		
SUMP WATER		

SIGN OR INITIAL THESE COLUMNS

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

HOISTING MACHINERY RECORD

Date_____ Craft _____

INSTRUCTIONS

CIRCLE THE EQUIPMENT # SERVICED

EQUIPMENT #	DESCRIPTION
38-GM-001 BRAKE	AUX AIR COMP.
38-GM-002 & 3	HOIST BEARING OIL PUMP A & B
38-H-001	SH HOIST DRUM ASSY
38-H-002	SH HOIST HEADSHEAVE
38-H-003	SH HOIST ROPE ASSY
38-H-008	LILLY CONTROLLER
38-K-001	BRAKE AIR DRYER/FILTER SYS.
38-H-012A & B	BRAKE ENGINE

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

ELECTRICAL HOISTING EQUIPMENT RECORD

Date_____ Craft _____

INSTRUCTIONS

CIRCLE THE EQUIPMENT # SERVICED

EQUIPMENT #	DESCRIPTION
38P-HC04/1,2,3	PROCESS CONTROL PANEL
38P-MOC03/1	CONTROL CONSOLE
38-HM-001	SH HOIST DRIVE MOTOR
38-HMG-001A	DC GENERATOR
38-HMG-001B	SYNCHRONOUS MOTOR
38P-BC-03/1	DECELRTIN CNTR DYNPAR
38P-FE03/1	MG FIELD EXCITER
38P-PC04/A&B	SILCOMATIC PLUS
38P-SMC05/1	LIMITAMP CNTRLE
38P-SW04/1	PRINGLE SWITCH
38P-IR04/1	INTERPHASE REACTOR
38P-HCS 03/1	REMOTE STATION COLLAR
38P-HCS 03/2	REMOTE STATION-STATION
38P-HCS 03/3	REMOTE STATION-LOAD POCKET
38P-HF-1	SUB HARMONIC FILTER

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

WP 04-HO1002-1

Salt Hoist Operator's Log
WP 04-HO1002-1 (reverse side - continued)

Figure G-4

WASTE HOIST OPERATOR'S LOG

DATE: _____

NIGHT SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.
I tested the hoist brakes at _____(time) and report as follows: _____
_____
I have tested the overwinds at_____ (time), and report as follows: _____
I made the following trial trips and report as follows (give time) _____
The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____
The working condition of the signaling equipment was as follows: _____
Hoistman _____ Reviewed by: _____

Waste Hoist Inspection		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Disc Brake Paths - Clean	☐		
3 Hoist Bearings - Lube Level	☐		
4 Brake Reservoir - Oil Level	☐		
5 Hydraulic Pipes - Leaks	☐		
6 Brake Drain Lines	☐		
7 Brake Drain Collector	☐		
8 Motor Shaft Ground Brushes	☐		
9 Lilly Controller	☐		
10 Brake Maint. Valves - Locked	☐		
11 Notified CMR - Hoist Operable	☐		
TIME			
Comments:			
Hoistman _____ Time			

Waste Collar Inspection			
1 Examination of Work Area			
2 Mine Phone - Functional	☐		
3 Bells - Functional	☐		
4 Hst. Rope Cappels-Cage & Cntrwght	☐		
5 Fixed Guides - Cage	☐		
6 Fixed Guides - Cntrwght	☐		
7 Rope Shoes - Cage (8 Ea.)	☐		
8 Trolley Phone - Functional	☐		
9 Track Limits (~~2~~ 3 Ea.)	☐		
	☐		
Comments:			
Toplander _____ Time _____			

Waste Station Inspection			
1 Examination of Work Area	☐		
2 Control Panel - Lights	☐		
3 Mine Phone - Functional	☐		
4 Bells - Functional	☐		
5 Rope Shoes Cntrwght	☐		
6 Tail Rope Cappels-Cage & Cntrwght	☐		
7 Chairs Proper Function	☐		
8 Chairs Physical Conditions	☐		
9 Fixed Guides Cage & Cntrwght	☐		
Comments:			
Bottomlander _____Time_____			

DAY SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.
I tested the hoist brakes at _____(time) and report as follows: _____
_____
I have tested the overwinds at_____ (time), and report as follows: _____
I made the following trial trips and report as follows (give time)_____
The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____
The working condition of the signaling equipment was as follows:_____
Hoistman _____ Reviewed by: _____

Waste Hoist Inspection		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Disc Brake Paths - Clean	☐		
3 Hoist Bearings - Lube Level	☐		
4 Brake Reservoir - Oil Level	☐		
5 Hydraulic Pipes - Leaks	☐		
6 Brake Drain Lines	☐		
7 Brake Drain Collector	☐		
8 Motor Shaft Ground Brushes	☐		
9 Lilly Controller	☐		
10 Brake Maint. Valves - Locked	☐		
11 Notified CMR - Hoist Operable	☐		
TIME			
Comments:			
Hoistman _____ Time			

Waste Collar Inspection			
1 Examination of Work Area			
2 Mine Phone - Functional	☐		
3 Bells - Functional	☐		
4 Hst. Rope Cappels-Cage & Cntrwght	☐		
5 Fixed Guides - Cage	☐		
6 Fixed Guides - Cntrwght	☐		
7 Rope Shoes - Cage (8 Ea.)	☐		
8 Trolley Phone - Functional	☐		
9 Track Limits (~~2~~ 3 Ea.)	☐		
Comments:			
Toplander _____ Time _____			

Waste Station Inspection			
1 Examination of Work Area	☐		
2 Control Panel - Lights	☐		
3 Mine Phone - Functional	☐		
4 Bells - Functional	☐		
5 Rope Shoes Cntrwght	☐		
6 Tail Rope Cappels-Cage & Cntrwght	☐		
7 Chairs Proper Function	☐		
8 Chairs Physical Conditions	☐		
9 Fixed Guides Cage & Cntrwght	☐		
Comments:			
Bottomlander _____Time_____			

MID SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.
I tested the hoist brakes at _____(time) and report as follows: _____
_____
I have tested the overwinds at_____ (time), and report as follows: _____
I made the following trial trips and report as follows (give time) _____
The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____
The working condition of the signaling equipment was as follows:_____
Hoistman _____ Reviewed by:_____

Waste Hoist Inspection		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Disc Brake Paths - Clean	☐		
3 Hoist Bearings - Lube Level	☐		
4 Brake Reservoir - Oil Level	☐		
5 Hydraulic Pipes - Leaks	☐		
6 Brake Drain Lines	☐		
7 Brake Drain Collector	☐		
8 Motor Shaft Ground Brushes	☐		
9 Lilly Controller	☐		
10 Brake Maint. Valves - Locked	☐		
11 Notified CMR - Hoist Operable	☐		
TIME			
Comments:			
Hoistman _____ Time			

Waste Collar Inspection			
1 Examination of Work Area	☐		
2 Mine Phone - Functional	☐		
3 Bells - Functional	☐		
4 Hst. Rope Cappels-Cage & Cntrwght	☐		
5 Fixed Guides - Cage	☐		
6 Fixed Guides - Cntrwght	☐		
7 Rope Shoes - Cage (8 Ea.)	☐		
8 Trolley Phone - Functional	☐		
9 Track Limits (~~2~~ 3 Ea.)	☐		
Comments:			
Toplander _____ Time _____			

Waste Station Inspection			
1 Examination of Work Area	☐		
2 Control Panel - Lights	☐		
3 Mine Phone - Functional	☐		
4 Bells - Functional	☐		
5 Rope Shoes Cntrwght	☐		
6 Tail Rope Cappels-Cage & Cntrwght	☐		
7 Chairs Proper Function	☐		
8 Chairs Physical Conditions	☐		
9 Fixed Guides Cage & Cntrwght	☐		
Comments:			
Bottomlander _____Time_____			

SPECIAL INSTRUCTIONS
Requires Time, Date, & Authorized Signatures

_____
_____
_____

WP 04-HO1003-1

Waste Hoist Operator's Log
WP 04-HO1003-1

WASTE HOIST OPERATOR'S LOG

SHAFT INSPECTION RECORD

Date _____ Craft _____

Weekly Inspection FAC. 371

Items Examined	OK	SEE COMMENTS
SHAFT LINER		
SALT BUILD-UP		
WATER RINGS & DRAINS		
WALL ROCK & BROW		
CONVEYANCE CLEARANCE		
CABLE, PIPES & SUPPORTS		
LADDERS & LANDINGS		
TAIL ROPE FOUL & DIVIDERS		
CHEESE WEIGHTS		
SUMP WATER		
WS CONVEYANCE		
TAIL RPS & CNTRWGHT		
GUIDE ROPES & CHEESEWEIGHTS		

SIGN OR INITIAL THESE COLUMNS

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

HOISTING MACHINERY RECORD

Date _____ Craft _____

INSTRUCTIONS

CIRCLE THE EQUIPMENT # SERVICED

EQUIPMENT #	DESCRIPTION
31-G-002	BRAKE SYSTEM
31-G-002	BRAKE PADS
31-H-001	WH WHEEL ASSEMBLY
31-H-002	DEFLCTIN SHEAVE ASSY
31-H-003	WS CONVEYANCE
31-H-005	HOISTING ROPES ASSY
31-H-009	LILLY CONTROLLER
31-Q-002A & B	ROLLING BEAM CHAIRS
31-H-019	AUX. DRIVE ASSY
31-H-025	LILLY RESYNCH

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

ELECTRICAL HOISTING EQUIPMENT RECORD

Date _____ Craft _____

INSTRUCTIONS

CIRCLE THE EQUIPMENT # SERVICED

EQUIPMENT #	DESCRIPTION
31-H-010A	WH MASTER CONTROLS
31-H-010B	WH COLLAR
31-H-010C	WH STATION
31-H-022	SELSYN GENERATOR
31-H-024	PRMNT MAG TAC GEN
31-H-031	SELSYN MOTOR
31-HM-001	W/H DRIVE MOTOR
31-HM-001A	FAN W/H MOTOR COOLING
31-H-010B	REMOTE STATION CHECKS
31-H-010C	REMOTE STATION CHECKS
31-H-010D	REMOTE STATION CHECKS
31-H-010E	REMOTE STATION CHECKS
31-H-010F	REMOTE STATION CHECKS
31-H-P004/1	W/H SILCO

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

WP 04-HO1003-1

Waste Hoist Operator's Log
WP 04-HO1003-1 (reverse side - continued)

AIS HOIST OPERATOR'S LOG

DATE: _____

NIGHT SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.
I tested the hoist brakes at _____(time) and report as follows:_____

I have tested the overwinds at_____ (time), and report as follows:_____

I made the following trial trips and report as follows (give time) _____
The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____

The working condition of the signaling equipment was as follows: _____

Hoistman _____ Reviewed by: _____

DAY SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.
I tested the hoist brakes at _____(time) and report as follows:_____

I have tested the overwinds at_____ (time), and report as follows:_____

I made the following trial trips and report as follows (give time) _____
The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____

The working condition of the signaling equipment was as follows: _____

Hoistman _____ Reviewed by:_____

MID SHIFT

I have read and noted all entries made by the previous shift hoistman and all special instructions.
I tested the hoist brakes at _____(time) and report as follows:_____

I have tested the overwinds at_____ (time), and report as follows:_____

I made the following trial trips and report as follows (give time) _____
The working condition of the hoist: including brakes, clutches, and their interlocks: and depth indicator: and all safety devices and fittings: as follows: _____

The working condition of the signaling equipment was as follows: _____

Hoistman _____ Reviewed by:_____

AIS HOIST INSPECTION		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Brake Paths - Clean	☐		
3 Hoist Bearings - Oil Flow	☐		
4 Pump Reservoir - Oil Level	☐		
5 Lilly Controller - Functional	☐		
6 Hoist Gen.-No loose Connections	☐		
7 Notified CMR - Hoist Operable	☐		
TIME			
Comments:			
Hoistman _____ Time_____			

Collar Inspection			
1 Examination of Work Area	☐		
2 Rope Connection - No Slippage	☐		
3 Cage Latches & hinges	☐		
4 Cage Welds - No Cracks	☐		
5 Cage Phone or Radio	☐		
6 Mine Phone - Functional	☐		
7 Collar Doors	☐		
8 Bell Signal - Functional	☐		
Comments:			
Toplander _____ Time _____			

Station Inspection			
1 Examination of Work Area	☐		
2 Safety Gates - No Damage	☐		
3 Bell Signal - Functional	☐		
4 Mine Phone - Functional	☐		
Comments:			
Bottomlander _____ Time ____			

GALLOWAY INSPECTION		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Communication - Functional	☐		
3 Rope Connections	☐		
4 Structure Welds - No Cracks	☐		
5 Trap Doors & Wings	☐		
6 Fire Extinguisher - Charged	☐		
7 First Aid Kit - Usable	☐		
Comments:_____			
Operator _____ Time ____			

AIS HOIST INSPECTION		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Brake Paths - Clean	☐		
3 Hoist Bearings - Oil Flow	☐		
4 Pump Reservoir - Oil Level	☐		
5 Lilly Controller - Functional	☐		
6 Hoist Gen.-No loose Connections	☐		
7 Notified CMR - Hoist Operable	☐		
TIME			
Comments: _____			
Hoistman _____ Time_____			

Collar Inspection			
1 Examination of Work Area	☐		
2 Rope Connection - No Slippage	☐		
3 Cage Latches & hinges	☐		
4 Cage Welds - No Cracks	☐		
5 Cage Phone or Radio	☐		
6 Mine Phone - Functional	☐		
7 Collar Doors	☐		
8 Bell Signal - Functional	☐		
Comments: _____			
Toplander _____ Time _____			

Station Inspection			
1 Examination of Work Area	☐		
2 Safety Gates - No Damage	☐		
3 Bell Signal - Functional	☐		
4 Mine Phone - Functional	☐		
Comments: _____			
Bottomlander _____ Time ____			

GALLOWAY INSPECTION		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Communication - Functional	☐		
3 Rope Connections	☐		
4 Structure Welds - No Cracks	☐		
5 Trap Doors & Wings	☐		
6 Fire Extinguisher	☐		
7 First Aid Kit - Usable	☐		
Comments:_____			
Operator _____ Time _____			

AIS HOIST INSPECTION		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Brake Paths - Clean	☐		
3 Hoist Bearings - Oil Flow	☐		
4 Pump Reservoir - Oil Level	☐		
5 Lilly Controller - Functional	☐		
6 Hoist Gen.-No loose Connections	☐		
7 Notified CMR - Hoist Operable	☐		
TIME			
Comments: _____			
Hoistman _____ Time_____			

Collar Inspection			
1 Examination of Work Area	☐		
2 Rope Connection - No Slippage	☐		
3 Cage Latches & hinges	☐		
4 Cage Welds - No Cracks	☐		
5 Cage Phone or Radio	☐		
6 Mine Phone - Functional	☐		
7 Collar Doors	☐		
8 Bell Signal - Functional	☐		
Comments: _____			
Toplander _____ Time _____			

Station Inspection			
1 Examination of Work Area	☐		
2 Safety Gates - No Damage	☐		
3 Bell Signal - Functional	☐		
4 Mine Phone - Functional	☐		
Comments: _____			
Bottomlander _____ Time ____			

GALLOWAY INSPECTION		TIME	COMMENTARY
1 Examination of Work Area	☐		
2 Communication - Functional	☐		
3 Rope Connections	☐		
4 Structure Welds - No Cracks	☐		
5 Trap Doors & Wings	☐		
6 Fire Extinguisher	☐		
7 First Aid Kit - Usable	☐		
Comments:_____			
Operator _____ Time _____			

SPECIAL INSTRUCTIONS

Requires Time, Date, & Authorized Signatures

_____

_____

_____

WP 04-HO1004-1

Air In-Take Shaft Operator's Log
WP 04-HO1004-1

AIS HOIST OPERATOR'S LOG

SHAFT INSPECTION RECORD

Date _____ Craft _____

Weekly Inspection FAC. 361

Item Examined	OK	SEE COMMENTS
33-H-007 AIS WIRE ROPES	W - -	SA -
GALLOWAY		
SHAFT LINER		
WATER RINGS & DRAINS		
WALL ROCK & BROW		
CONVEYANCE		
CABLE, PIPES & SUPPORTS		
TRACK LIMIT SWITCH		

SIGN OR INITIAL THESE COLUMNS

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

HOISTING MACHINERY RECORD

MECHANICAL

Date _____ Craft _____

INSTRUCTIONS

CIRCLE THE EQUIPMENT # SERVICED

EQUIPMENT #	DESCRIPTION
31-G-001	AIR COMP.
33-H-001	AIS HOIST
33-H-002	AIS HEADFRAME
33-H-009	LILLY CONTROLLER
33-H-010	NEW ERA WINCH-WEST
33-H-011	NEW ERA WINCH-EAST

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

ELECTRICAL HOISTING EQUIPMENT RECORD

Date _____ Craft _____

INSTRUCTIONS

CIRCLE THE EQUIPMENT # SERVICED

EQUIPMENT #	DESCRIPTION
31-HM-001	AIS HOIST MOTOR
33-HS-011A	M/S - EAST GALLOWAY WINCH
33-HS-010A	M/S - WEST GALLOWAY WINCH
33P-MOC-C03/1	GALLOWAY CONTROL PANEL
33P-WOC-03/12	HOIST CONTROL CONSOLE
33P-RB04/1	HOIST CONTROLLER
33-HM-010	WEST GALLOWAY WINCH MOTOR
33-HM-011	EAST GALLOWAY WINCH MOTOR

COMMENTS

_____ SIGNATURE HOIST MANAGER (OPS)

WP 04-HO1004-1

Air In-Take Shaft Operator's Log
WP 04-HO1004-1 (reverse side - continued)

Item 17. a. Revised Figures F-2, F-3, F-5, and F-9

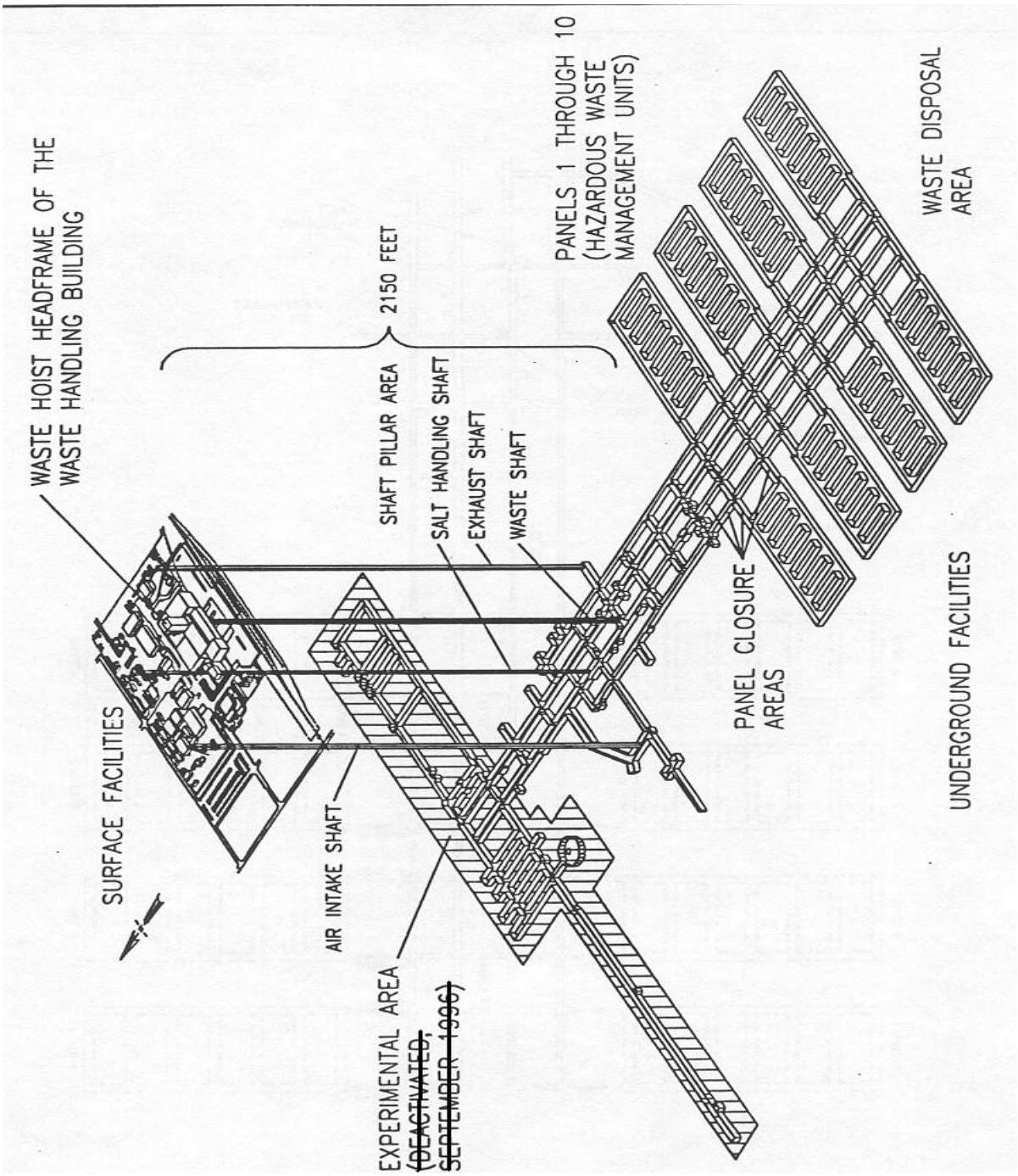

Figure F-2
Spatial View of the WIPP Facility

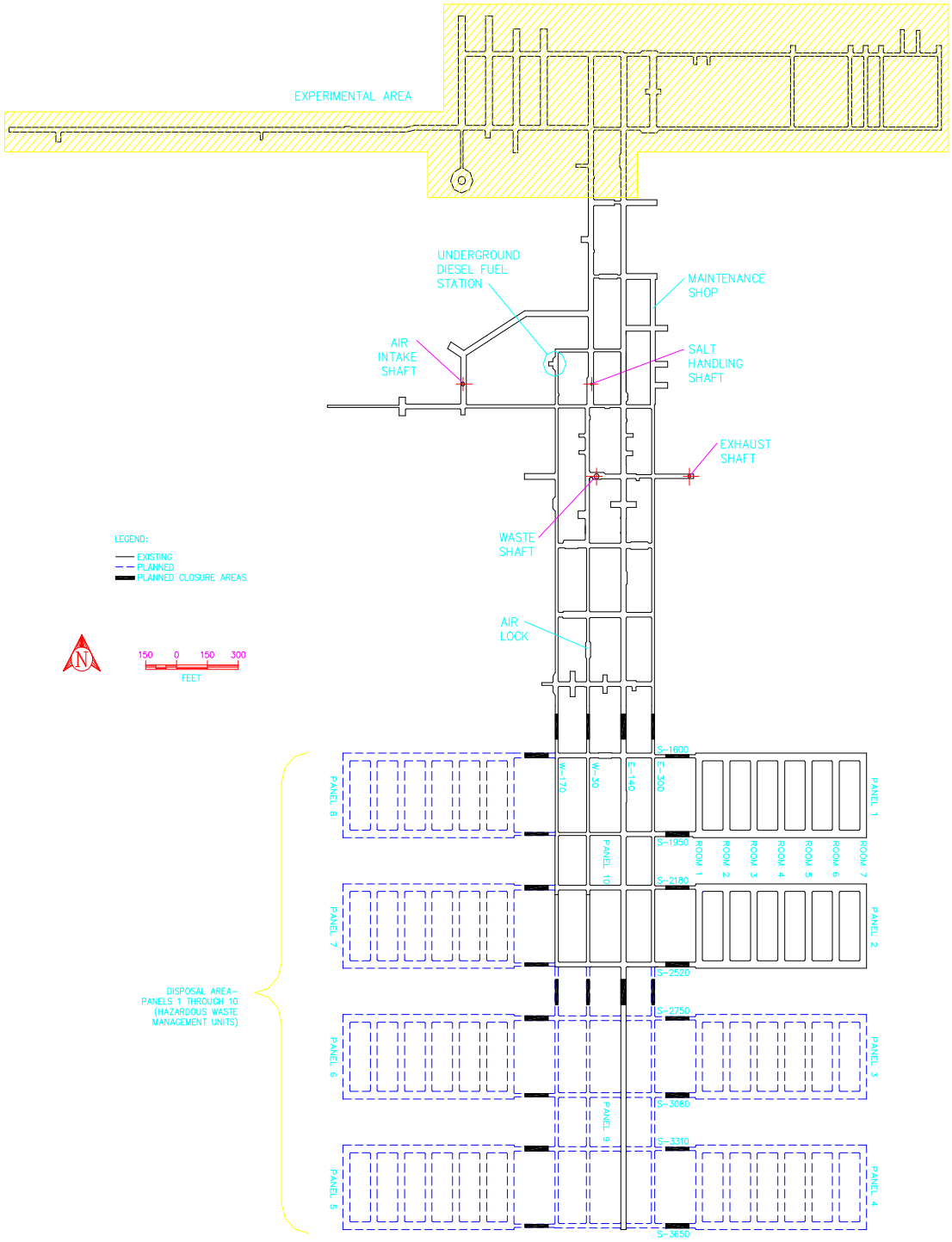

Figure F-3
WIPP Underground Facilities

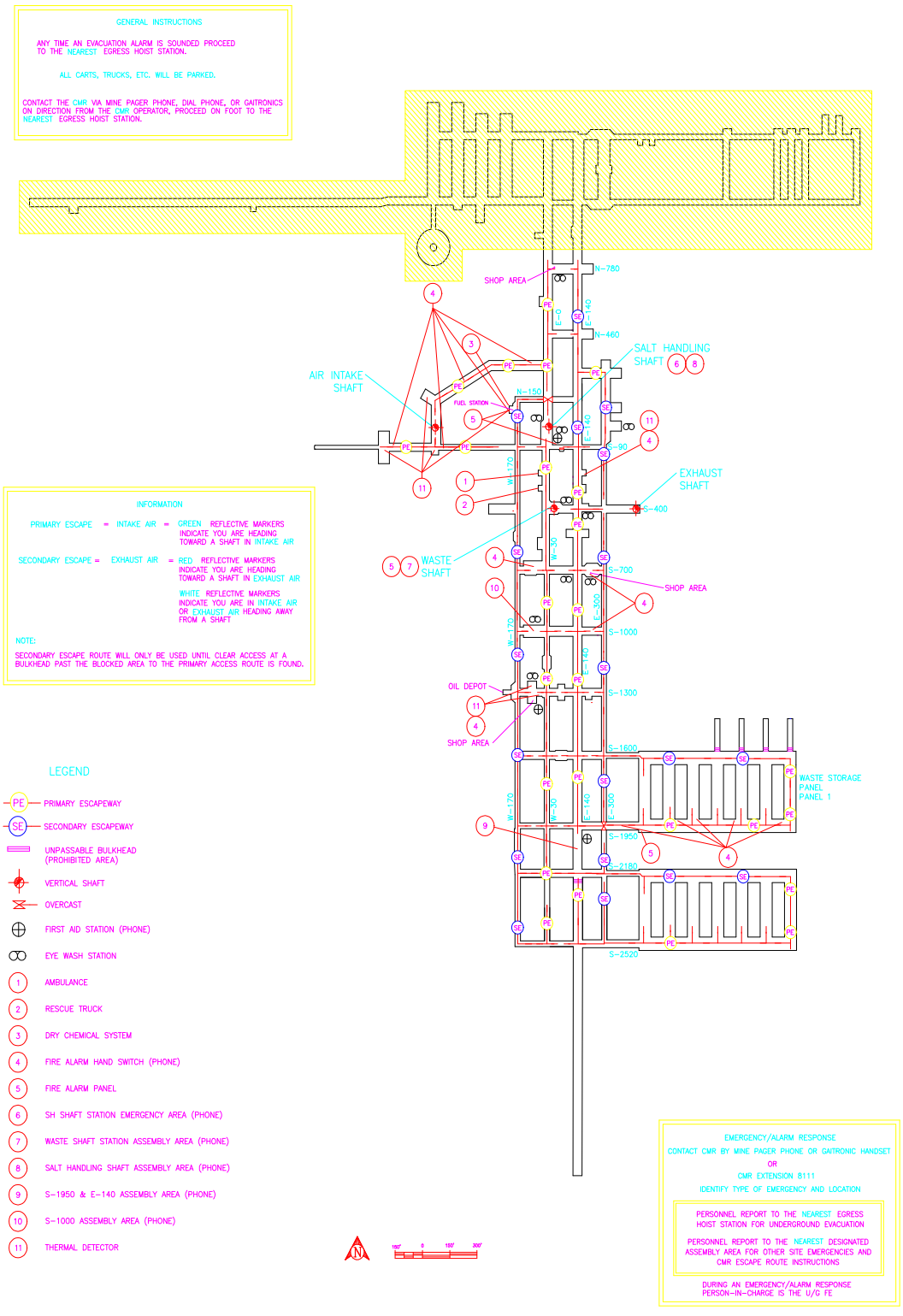

Figure F-5
Underground Emergency Equipment Locations and Underground Evacuation Routes

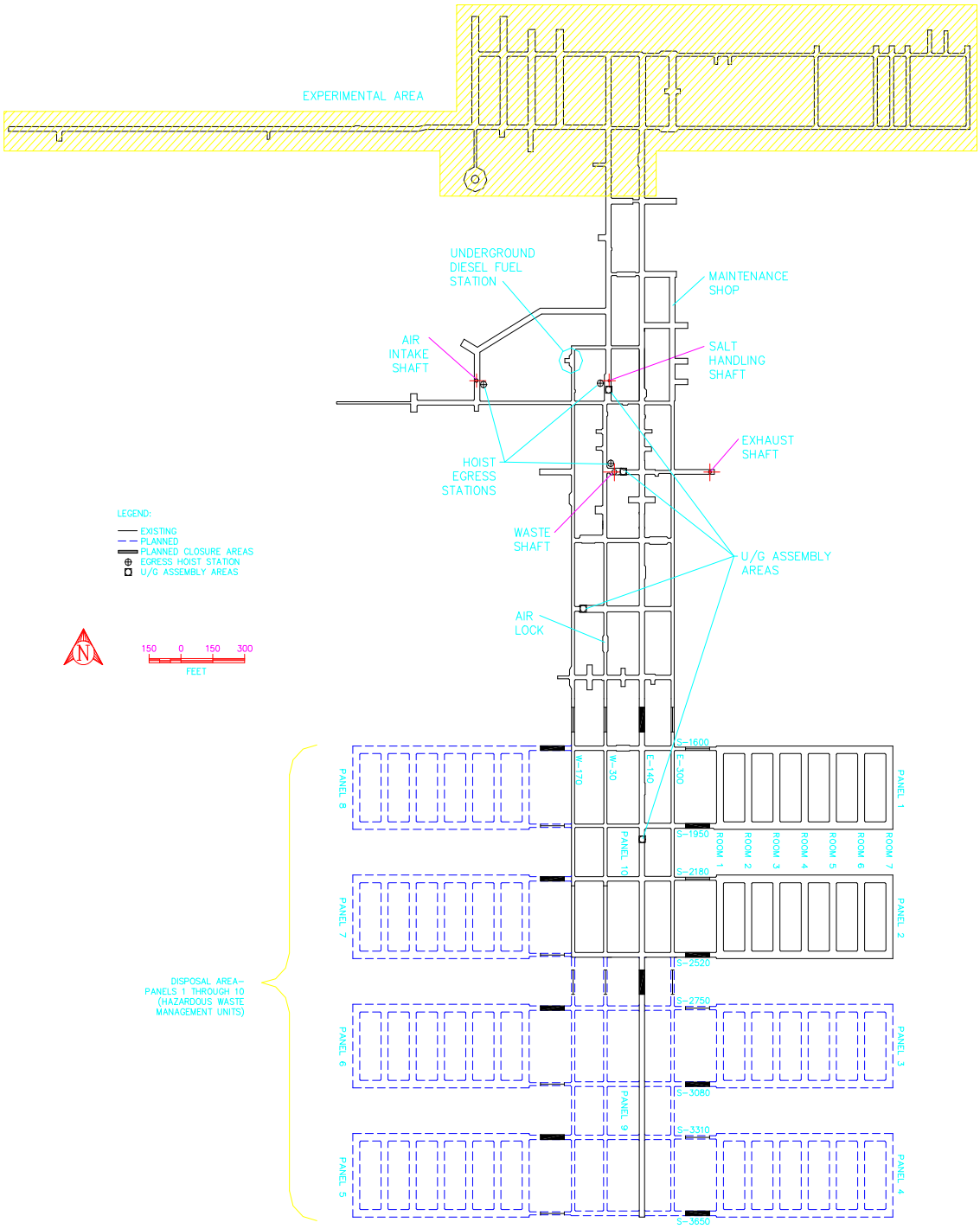

Figure F-9
Designated Underground Assembly Areas

Item 17. b. Revised Figure I-6

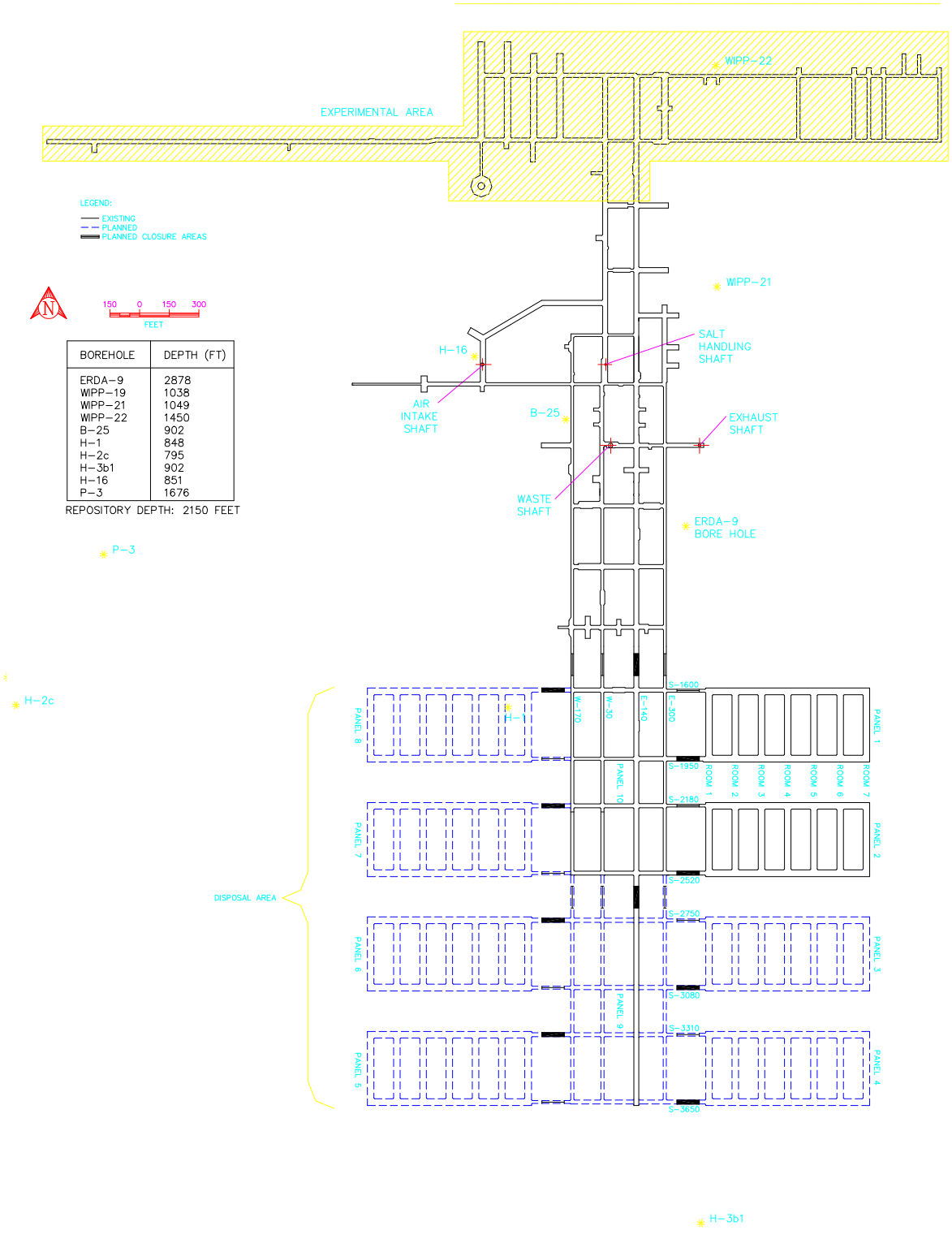

Figure I-6
Approximate Location of Boreholes in Relation to the WIPP Underground

Item 17. c. Revised Figure M2-2

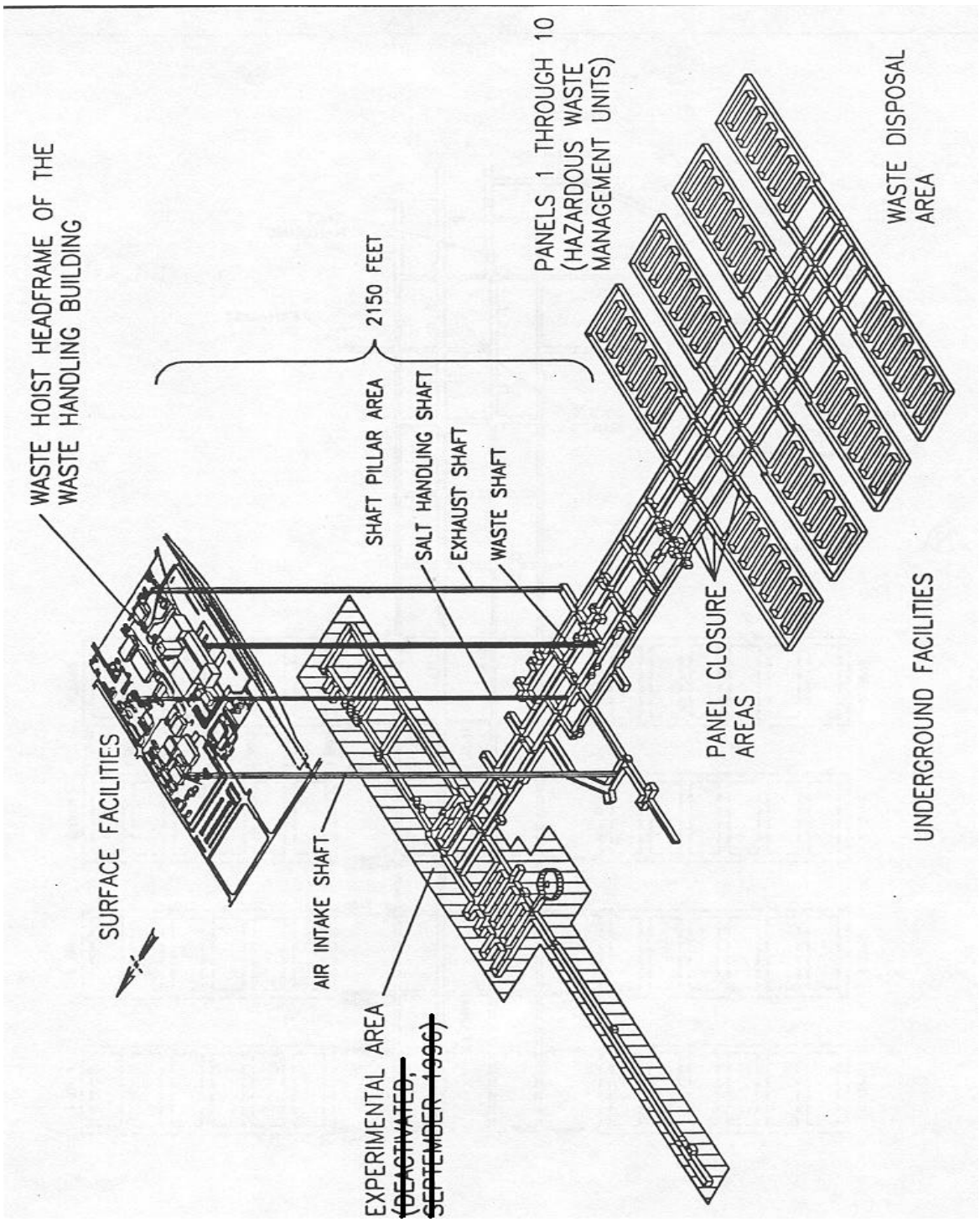

Figure M2-2
Spatial View of the Miscellaneous Unit and Waste Handling Facility